

**RIDGECROFT SCHOOL  
GRADE 5 SCIENCE**

**PACING GUIDE**

<b>TOPICS/CONCEPTS</b>	<b>TIME</b>	<b>CURRICULUM OBJECTIVES</b>	<b>RESOURCE(S)</b>
<b>FIRST GRADING PERIOD</b>			
PLANT GROWTH AND ADAPTATIONS	30	1.01, 1.02, 1.03, 1.04, 1.05, 1.06	AIMS Module: Budding Botanist TEXTBOOK: Chapter 9 Plant Classification STC Kit: Experiments with Plants (Purchase 2 <sup>nd</sup> year)
<b>SECOND GRADING PERIOD</b>			
FORCES AND MOTION IN TECHNOLOGICAL DESIGNS	30	4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07	STC Kit: Motion and Design AIMS Module: Gravity Rules AIMS Module: Popping with Power TEXTBOOK: Chapter 8 Energy Around Us and Chapter 6 Forces
<b>THIRD GRADING PERIOD</b>			
FORCES AND MOTION IN TECHNOLOGICAL DESIGNS	30	4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07	STC Kit: Motion and Design AIMS Module: Gravity Rules AIMS Module: Popping with Power TEXTBOOK: Chapter 8 Energy Around Us and Chapter 6 Forces
<b>FOURTH GRADING PERIOD</b>			
FORCES AND MOTION IN TECHNOLOGICAL DESIGNS	10	4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07	STC Kit: Motion and Design AIMS Module: Gravity Rules AIMS Module: Popping with Power TEXTBOOK: Chapter 8 Energy Around Us and Chapter 6 Forces
ANIMAL BEHAVIOR AND ADAPTATION	20	2.01, 2.02, 2.03, 2.04, 2.05	STC Kit: Ecosystem AIMS Module: Critters TEXTBOOK: Chapter 1 Animal Classification
<b>FIFTH GRADING PERIOD</b>			
INTERDEPENDENCE OF PLANTS AND ANIMALS	30	3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07	STC Kit: Ecosystem AIMS Module: Critters AIMS Module: Budding Botanist
<b>SIXTH GRADING PERIOD</b>			
INTERDEPENDENCE OF PLANTS AND ANIMALS	30	3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07	STC Kit: Ecosystem AIMS Module: Critters AIMS Module: Budding Botanist

10/30/06

### GOALS AND OBJECTIVES

**NOTE: The goals and objectives for Grades K-5 science are based on a reclustering of the NC Standard Course of Study.**

<p><b>GOAL 1: The learner will conduct investigations and build an understanding of plant growth and adaptations.</b></p> <p>1.01 Observe and measure how the quantities and qualities of nutrients, light, and water in the environment affect plant growth.</p> <p>1.02 Observe and describe how environmental conditions determine how well plants survive and grow in a particular environment.</p> <p>1.03 Investigate and describe how plants pass through distinct stages in their life cycle including.</p> <ul style="list-style-type: none"><li>• Growth.</li><li>• Survival.</li><li>• Reproduction.</li></ul> <p>1.04 Explain why the number of seeds a plant produces depends on variables such as light, water, nutrients, and pollination.</p> <p>1.05 Observe and discuss how bees pollinate flowers.</p> <p>1.06 Observe, describe and record properties of germinating seeds.</p>	<p><b>GOAL 2: The learner will make observations and conduct investigations to build an understanding of animal behavior and adaptation.</b></p> <p>2.01 Observe and describe how all living and nonliving things affect the life of a particular animal including: (other animals, plants, weather, climate)</p> <p>2.02 Observe and record how animals of the same kind differ in some of their characteristics and discuss possible advantages and disadvantages of this variation.</p> <p>2.03 Observe and discuss how behaviors and body structures help animals survive in a particular habitat.</p> <p>2.04 Explain and discuss how humans and other animals can adapt their behavior to live in changing habitats.</p> <p>2.05 Recognize that humans can understand themselves better by learning about other animals.</p>	<p><b>GOAL 3: The learner will conduct investigations to build an understanding of the interdependence of plants and animals.</b></p> <p>3.01 Describe and compare several common ecosystems (communities of organisms and their interaction with the environment).</p> <p>3.02 Identify and analyze the functions of organisms within the population of the ecosystem: (producers, consumers, decomposers)</p> <p>3.03 Explain why an ecosystem can support a variety of organisms.</p> <p>3.04 Discuss and determine the role of light, temperature, and soil composition in an ecosystem's capacity to support life.</p> <p>3.05 Determine the interaction of organisms within an ecosystem.</p> <p>3.06 Explain and evaluate some ways that humans affect ecosystems (habitat reduction due to development, pollutants, increased nutrients)</p> <p>3.07 Determine how materials are recycled in nature.</p>	<p><b>GOAL 4: The learner will conduct investigations and use appropriate technologies to build an understanding of forces and motion in technological designs.</b></p> <p>4.01 Determine the motion of an object by following and measuring its position over time</p> <p>4.02 Evaluate how pushing or pulling forces can change the position and motion of an object.</p> <p>4.03 Explain how energy is needed to make machines move. (moving air, gravity)</p> <p>4.04 Determine that an unbalanced force is needed to move an object or change its direction.</p> <p>4.05 Determine factors that affect motion including: (force, friction, inertia, momentum)</p> <p>4.06 Build and use a model to solve a mechanical design problem.(devise a test for the model, evaluate the results of test.)</p> <p>4.07 Determine how people use simple machines to solve problems.</p>
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