

Prince George County Public Schools

Third Grade Science Pacing Guide

SOLs should be taught so that each student will have mastered that particular SOL by the end of the nine week period. The skills listed in each nine weeks will be assessed.

First Nine Weeks	Second Nine Weeks
<p><i>The student will...</i></p> <p>3.1¹... demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which</p> <ol style="list-style-type: none"> a) observations are made and repeated for accuracy; b) predictions are formulated using a variety of sources of information c) objects with similar characteristics or properties are classified into at least two sets and two subsets; d) natural events are sequenced chronologically; e) length, volume, mass and temperature are estimated and measured in metric and standard English units using proper tools and techniques f) time is measured to the nearest minute using proper tools and techniques; g) questions are developed to formulate hypotheses; h) data are gathered, charted, graphed, and analyzed i) unexpected or unusual quantitative data are recognized k) data are communicated ; l) models are designed and built; m) current applications are used to reinforce science concepts <p>3.2²...investigate and understand simple machines and their uses.</p> <p>Key concepts include</p> <ol style="list-style-type: none"> a) purpose and functions of simple machines b) types of simple machines (lever, screw, pulley, wheel and axle, inclined plane, and wedge); c) compound machines (scissors, wheelbarrow, bicycle d) examples of simple and compound machines found in the school, home, and work environment. <p>3.7⁶...investigate and understand the major components of soil its origin and importance to plants and animals including humans.</p> <p>Key concepts include</p> <ol style="list-style-type: none"> a) soil provides the support and nutrients necessary for plant growth; b) topsoil is a natural product of subsoil and bedrock; c) rock, clay, silt, sand, and humus are components of soils; d) soil is a natural resource and should be conserved 	<p><i>The student will...</i></p> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 10px;">3.1</div> → Extend objective from 1 st nine weeks <p>3.4⁴...investigate and understand that adaptations allow animals to satisfy life needs and respond to the environment. Key concepts include</p> <ol style="list-style-type: none"> a) behavioral adaptations; and b) physical adaptations <p>3.5⁵...investigate and understand relationships among organisms in aquatic and terrestrial food chains. Key concepts include</p> <ol style="list-style-type: none"> a) producer, consumer, decomposer; b) herbivore, carnivore, omnivore; and c) predator and prey. <p>3.6⁵...investigate and understand that ecosystems support a diversity of plants and animals that share limited resources. Key concepts include</p> <ol style="list-style-type: none"> a) aquatic ecosystems b) terrestrial ecosystems; c) population and community; and d) the human role in conserving limited resources

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Third Nine Weeks	Fourth Nine Weeks
<p><i>The student will...</i></p> <p>3.1 → Extend objective from 1st and 2nd nine weeks</p> <p>3.3³...investigate and understand that objects are made of materials that can be described by their physical properties. Key concepts include</p> <ul style="list-style-type: none"> a) objects are made of one or more materials; b) physical properties remain the same as the material is changed in visible size; and c) visible physical changes are identified <p>3.8⁷...investigate and understand basic patterns and cycles occurring in nature. Key concepts include</p> <ul style="list-style-type: none"> a) patterns of natural events such as day and night, seasonal changes, simple phases of the moon, and tides; and b) animal life cycles c) plant life cycles. <p>3.9⁷...investigate and understand the water cycle and its relationship to life on Earth. Key concepts include</p> <ul style="list-style-type: none"> a) there are many sources of water on Earth b) the energy from the sun drives the water cycle; c) the water cycle involves several processes; d) water is essential for living things; and e) water on Earth is limited and needs to be conserved 	<p><i>The student will...</i></p> <p>3.1 → Extend objective from 1st, 2nd, and 3rd nine weeks</p> <p>3.10⁸...investigate and understand that natural events and human influences can affect the survival of species. Key concepts include</p> <ul style="list-style-type: none"> a) the interdependency of plants and animals; b) the effects of human activity on the quality of air, water, and habitat; c) the effects of fire, flood, disease, and erosion on organisms; and d) conservation and resource renewal. <p>3.11⁸...investigate and understand different sources of energy. Key concepts include</p> <ul style="list-style-type: none"> a) energy from the sun; b) sources of renewable energy; and c) sources of nonrenewable energy

Reporting Categories

¹Scientific Investigation, Reasoning and Logic

²Force, Motion, and Energy

³Matter

⁴Life Processes

⁵Living Systems

⁶Interrelationships in Earth/Space Systems

⁷Earth, Patterns, Cycles, and Change

⁸Earth Resources

Alternate Assessments: January (3.1, 3.2, 3.4, 3.5, 3.6, 3.7) and March (3.1, 3.8, 3.9, 3.10, 3.11)