

**SCIENCE Fourth Grade**

<b>VALUES AND ATTITUDES</b>	The student will: Develop respect for God's gift of life. Understand that plants and animals are dependent on each other for survival. Realize the value of good stewardship. Understand that the earth is still changing and evolving. Understand that natural phenomena affect changes in the earth. Understand that meaningful questions extend our learning and understanding.
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**STRAND A Life Science**

<b>OBJECTIVES</b>
Life and Growth of Organisms <ul style="list-style-type: none"><li>• Describe ecosystems and related environmental conditions found in different areas of North Carolina.</li><li>• Relate structural characteristics and behavior of a variety of animals to their environment.</li><li>• Determine animal behaviors and body structures, in a specific habitat, that have growth and survival functions.</li><li>• Identify cells as units of life that can exist alone or as parts of plants and animals.</li><li>• Identify some cell organelles.</li><li>• Identify characteristic life activities in animals.</li><li>• Evaluate living and nonliving things that affect animal life.</li><li>• Describe energy flow through an ecosystem.</li></ul>

**STRAND B Earth Science**

<b>OBJECTIVES</b>
Rocks and Minerals <ul style="list-style-type: none"><li>• Describe the rock cycle.</li><li>• Describe the composition of a mineral.</li><li>• Analyze the mineral composition of rocks.</li><li>• Describe the uses of rocks and minerals.</li><li>• Using student made guidelines classify rocks.</li><li>• Determine that some changes in the earth are the result of slow processes.</li><li>• Determine that some changes in the earth are the result of rapid processes.</li><li>• Introduce concept that earth plate movements cause changes in earth's surface features. (Plate Tectonics)</li><li>• Continue to measure, monitor and predict weather.</li><li>• Identify our solar system as part of a universe.</li></ul>

**STRAND C Physical Science**

**OBJECTIVES**

Electricity and magnetism

- Design an electric circuit as a complete pathway.
- Analyze and discuss the ability of electric circuits to produce light, heat, sound and magnetic effects.
- Analyze the components of a light bulb.
- Assess the push and pull of magnets on materials made of iron.
- Measure magnetic effects over distance or through substances.
- Assess the invention of tools.
- Analyze how people use simple machines to solve problems.
- Evaluate the attributes of simple machines that can be manipulated to affect outcomes.
- Evaluate the parts of some simple machines that can be manipulated or combined to change outcomes.
- Determine which natural resources are necessary to construct machines and tools.
- Assess the natural resources needed to construct machines and tools.

**STRAND D Nature of Science**

**OBJECTIVES**

Conducting investigations

- Use observations to develop and answer a question.
- Present conclusions as an answer to a question.
- Differentiate observation from inference.
- Formulate and justify predictions based on cause and effect relationships.
- Test predictions through multiple trials.
- Draw conclusions about the relationship of predictions to results.
- Construct and interpret charts from measurements.
- Follow written instructions for scientific investigation.