

SCIENCE Fifth Grade

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| VALUES AND ATTITUDES | The student will: Appreciate God's gift of creation. Understand ecology/conservation/stewardship. Recognize that the processes and forces affecting our Earth are all interconnected. Appreciate the order of the physical world. Understand questioning is important to the scientific process. Realize organization is vital to experimentation. Understand that outcomes can be predicted. |
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STRAND A Life Science

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| OBJECTIVES |
| Interdependence of plants and animals <ul style="list-style-type: none">• Assess a variety of ecosystems.• Group examples in the six kingdoms of life.• Determine the function of producers, consumers, and decomposers within the ecosystem.• Determine the organisms an ecosystem can support.• Relate an ecosystem's capacity to support life to light, temperatures, and soil composition.• Evaluate sunlight as the major source of energy for ecosystems.• Determine how the energy source is passed from organism to organism in food webs.• Assess the interaction of organisms within an ecosystem. |

STANDARD B Earth Science

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| OBJECTIVES |
| Evaporation and condensation; and changing weather patterns <ul style="list-style-type: none">• Analyze the water cycle.• Analyze the formation of clouds and the relationship to weather systems.• Distinguish between weather, season and climate.• Relate local weather to global atmospheric movement.• Describe the relationship of the sun's energy to the atmospheric conditions.• Analyze the effect of the sun's energy on weather conditions, seasons, and climate.• Compile weather data and establish climate trends.• Evaluate the effect of the ocean on weather and climate.• Compare climates of today and in the past in various regions of the earth.• Describe the Earth in terms of layers: core, mantle, and crust.• Compare and contrast the rock structure and profile of plains, plateaus and mountains.• Summarize changes caused by erosion, weathering, and mass wasting.• Compare and contrast the stages of stream erosion.• Analyze theory of Plate Tectonics. (Review) |

STANDARD C Physical Science

OBJECTIVES

Matter

- Describe matter as any object that has mass and takes up space.
- Make measurements of mass, length, and volume using the metric system.
- Identify matter as being composed of small particles that are always moving.
- Distinguish between elements and compounds.
- Observe and describe some properties of the three states of matter.
- Introduce the concept that elements can be classified and organized according to their properties.
- Describe the sources and forms of energy.
- Assess society's use of energy.
- Analyze the interaction and transformation of the forms of energy.

STRAND D Nature of Science

OBJECTIVES

Conducting investigations

- Understand cause and effect relationships.
- Collect data, compare and contrast data, make inferences and draw conclusions.
- Classify objects using specific criteria.
- Develop tables and graphs based on data collected; develop questions as a result of data collected.
- Plan and conduct a simple investigation based on a student-developed question and write instructions that other students can follow to carry out the procedure.
- Identify a single independent variable in a scientific investigation. Explain how the variable can be used to collect information to answer a question about the results of the experiment.
- Select appropriate tools; make quantitative observations.