

**Main Criteria:** Alabama Courses of Study  
**Secondary Criteria:** Virtual Field Trips  
**Subjects:** Science, Social Studies  
**Grade:** 4  
**Correlation Options:** Show Correlated

**Alabama Courses of Study  
 Science**

Grade: 4 - Adopted: 2015

<b>STRAND / DOMAIN</b>	<b>AL.4.PS.</b>	<b>PHYSICAL SCIENCE</b>
<b>OBJECTIVE / CATEGORY</b>		<b>Energy</b>
<b>STANDARD</b>	4.PS.5.	<p>Compile information to describe how the use of energy derived from natural renewable and nonrenewable resources affects the environment (e.g., constructing dams to harness energy from water, a renewable resource, while causing a loss of animal habitats; burning of fossil fuels, a nonrenewable resource, while causing an increase in air pollution; installing solar panels to harness energy from the sun, a renewable resource, while requiring specialized materials that necessitate mining).</p> <p><u>Virtual Field Trips</u>            Grade 3 - Geography of Our Communities            The Amazon Rainforest - Part 2 - Younger Grades</p>
<b>STRAND / DOMAIN</b>	<b>AL.4.PS.</b>	<b>PHYSICAL SCIENCE</b>
<b>OBJECTIVE / CATEGORY</b>		<b>Waves and Their Applications in Technologies for Information Transfer</b>
<b>STANDARD</b>	4.PS.7.	<p>Develop and use models to show multiple solutions in which patterns are used to transfer information (e.g., using a grid of 1s and 0s representing black and white to send information about a picture, using drums to send coded information through sound waves, using Morse code to send a message).</p> <p><u>Virtual Field Trips</u>            Grade 3 - Geography of Our Communities</p>
<b>STRAND / DOMAIN</b>	<b>AL.4.LS.</b>	<b>LIFE SCIENCE</b>
<b>OBJECTIVE / CATEGORY</b>		<b>From Molecules to Organisms: Structures and Processes</b>
<b>STANDARD</b>	4.LS.9.	<p>Examine evidence to support an argument that the internal and external structures of plants (e.g., thorns, leaves, stems, roots, colored petals, xylem, phloem) and animals (e.g., heart, stomach, lung, brain, skin) function to support survival, growth, behavior, and reproduction.</p> <p><u>Virtual Field Trips</u>            African Safari            Galapagos Islands            Galapagos Islands - Espagnol            How Coral Reefs Are Formed            The Amazon Rainforest            Who Lives On a Coral Reef?</p>
<b>STANDARD</b>	4.LS.11.	<p>Investigate different ways animals receive information through the senses, process that information, and respond to it in different ways (e.g., skunks lifting tails and spraying an odor when threatened, dogs moving ears when reacting to sound, snakes coiling or striking when sensing vibrations).</p> <p><u>Virtual Field Trips</u>            African Safari            Who Lives On a Coral Reef?</p>
<b>STRAND / DOMAIN</b>	<b>AL.4.ESS.</b>	<b>EARTH AND SPACE SCIENCE</b>

OBJECTIVE / CATEGORY		Earth's Systems
STANDARD	4.ESS.14.	<p>Explore information to support the claim that landforms are the result of a combination of constructive forces, including crustal deformation, volcanic eruptions, and sediment deposition as well as a result of destructive forces, including erosion and weathering.</p> <p><u>Virtual Field Trips</u>  Galapagos Islands  Galapagos Islands - Espagnol  Grade 3 - Geography of Our Communities  National Parks - West - Alaska &amp; Hawaii  National Parks West - Nevada, California  National Parks West - Wyoming, Utah  National Parks of the Western Region - Part 1</p>
STANDARD	4.ESS.15.	<p>Analyze and interpret data (e.g., angle of slope in downhill movement of water, volume of water flow, cycles of freezing and thawing of water, cycles of heating and cooling of water, speed of wind, relative rate of soil deposition, amount of vegetation) to determine effects of weathering and rate of erosion by water, ice, wind, and vegetation using one single form of weathering or erosion at a time.</p> <p><u>Virtual Field Trips</u>  Grade 3 - Geography of Our Communities  National Parks - West - Alaska &amp; Hawaii  National Parks West - Wyoming, Utah  National Parks of the Western Region - Part 1</p>
STANDARD	4.ESS.17.	<p>Formulate and evaluate solutions to limit the effects of natural Earth processes on humans (e.g., designing earthquake, tornado, or hurricane-resistant buildings; improving monitoring of volcanic activity).</p> <p><u>Virtual Field Trips</u>  Grade 3 - Geography of Our Communities</p>