Alabama Course of Study correlated to
Reading Essentials in Science
Perfection Learning Corporation

8th Grade	Standard	Are We Alone? The Case for Extraterrestrial Life	Inside a Star	Lights in the Sky	Mysteries in Space: Cosmic Puzzles	Telescopes: Exploring the Beyond	Electricity and Magnetism	Heat	Light	Motion	Sound	Consumption and Waste	Energy Sources	Global Warming	Habitat Destruction	Keeping Our Food and Water Safe
Physical Science																
1	Identify steps within the scientific process.															
2	Describe the structure of atoms, including the location of protons, neutrons, and electrons.				x											
3	Determine the number of protons, neutrons, and electrons, and the mass of an element using the periodic table.															
4	State the law of conservation of matter.															
5	Differentiate between ionic and covalent bonds.															
6	Define solution in terms of solute and solvent.															
7	Describe states of matter based on kinetic energy of particles in matter.															
8	Identify Newton's three laws of motion.									x						
9	Describe how mechanical advantages of simple machines reduce the amount of force needed for work.															
10	Differentiate between potential and kinetic energy.												x			
11	Explain the law of conservation of energy and its relationship to energy transformation, including chemical to electrical, chemical to heat, electrical to light, electrical to mechanical, and electrical to sound.															
12	Classify waves as mechanical or electromagnetic.				x											