

Correlation of
Seeds of Science/Roots of Reading[®]
Integrated Science and Literacy Units

with the Alabama
Science Standards for Grade 3

Created November 2011



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The program was created by a team at the Lawrence Hall of Science at the University of California, Berkeley.

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Alabama Science Standards – 3 rd Grade	2 nd - 3 rd Grade				3 rd - 4 th Grade				4 th - 5 th Grade			
	Soil Habitats	Shoreline Science	Designing Mixtures	Gravity & Magnetism	Light Energy	Weather & Water	Variation and Adaptation	Digestion & Body Systems	Planets & Moons	Aquatic Ecosystems	Models of Matter	Chemical Changes
PHYSICAL SCIENCE												
1.) Classify substances as soluble or insoluble. Examples: - soluble-sugar in water, powdered drink in water; - insoluble-sand in water, oil in water			● ●								● ●	
2.) Identify physical and chemical changes of matter. Examples: - physical-chopping wood, - chemical-burning wood											● ●	● ●
3.) Describe ways energy from the sun is used. Examples: plant growth, light, heat					●	● ●				● ●		
• Identifying fossil fuels as a source of energy												
4.) Define force and motion.												
• Identifying forces that change an object's position or motion Examples: lifting, pushing, pulling				●				●	●			
• Identifying sources of friction Examples: rubbing hands together, applying sandpaper to wood												
• Describing the force of gravity				● ● ●					● ● ●			
5.) Identify the relationship of simple machines to compound machines.												

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Example: pencil sharpener composed of a wheel and axle, inclined plane, and wedge												
LIFE SCIENCE												
6.) Identify structures and functions of the muscular and skeletal systems of the human body.							• •					
7.) Describe the life cycle of plants, including seed, seed germination, growth, and reproduction.	•					•						
• Describing the role of plants in a food chain	• • •											
• Identifying plant and animal cells												
• Describing how plants occupy space and use light, nutrients, water, and air	• •						• •		• •			
• Classifying plants according to their features Examples: evergreen or deciduous, flowering or non flowering	• •						• •		• •			
• Identifying helpful and harmful effects of plants Examples: - helpful-provide food, control erosion; - harmful-cause allergic reactions, produce poisons	•					•			•			
• Identifying how bees pollinate flowers												
• Identifying photosynthesis as the method used by plants to produce food												
8.) Identify how organisms are classified in the Animalia and Plantae kingdoms.												

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9.) Describe how fossils provide evidence of prehistoric plant life. Example: plant fossils in coal or shale providing evidence of existence of prehistoric ferns							● ●					
10.) Determine habitat conditions that support plant growth and survival. Examples: deserts support cacti, wetlands support ferns and mosses	● ● ●					●				● ● ●		
EARTH AND SPACE SCIENCE												
11.) Describe Earth's layers, including inner and outer cores, mantle, and crust.												
• Classifying rocks and minerals by characteristics, including streak, color, hardness, magnetism, luster, and texture												
12.) Identify conditions that result in specific weather phenomena, including thunderstorms, tornadoes, and hurricanes.						●						
• Identifying cloud types associated with specific weather patterns												
• Identifying positive and negative effects of weather phenomena Examples: - positive-flooding deposits good soil when waters recede, - negative-flooding kills crops						●						
• Identifying technology used to record and predict weather,						● ● ●						

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including thermometers, barometers, rain gauges, anemometers, and satellite												
• Explaining symbols shown on a weather map						•						
• Organizing weather data into tables or charts						•••						
13.) Describe ways to sustain natural resources, including recycling, reusing, conserving, and protecting the environment.	••	••				•				•		
• Recognizing the impact of society on human health and environmental conditions	•	•••			•	•		•	•	•••		
14.) Describe the position of Earth, the moon, and the sun during the course of a day or month.									•••			
• Describing various forms of technology used in observing Earth and its moon									•••			

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