

## Alabama Third Grade Course of Study

### Alignment to Science Modules

	Course of Study Objective	Science Module, Lesson
1.	Classify substances as soluble or insoluble. Examples: soluble—sugar in water, powdered drink in water; insoluble—sand in water, oil in water	Chemical Testing Lessons 4,5,14,16, Vocabulary ( <b>insoluble and soluble</b> ) is listed in the Presenter's Guide
2.	Identify physical and chemical changes of matter. Examples: physical—chopping wood, chemical—burning wood	Chemical Testing Lessons 4,5,6-10, 14,15,16 Teacher's Guide
3.	Describe ways energy from the sun is used. Examples: plant growth, light, heat	Plant Growth - Lesson 4 Presenter's Guide
	<ul style="list-style-type: none"> <li>● Identifying fossil fuels as a source of energy</li> </ul>	
4.	Define force and motion.	
	<ul style="list-style-type: none"> <li>● Identifying forces that change an object's position or motion Examples: lifting, pushing, pulling</li> </ul>	
	<ul style="list-style-type: none"> <li>● Identifying sources of friction Example: rubbing hands together, applying sandpaper to wood</li> </ul>	
	<ul style="list-style-type: none"> <li>● Describing the force of gravity</li> </ul>	
5.	Identify the relationship of simple machines to compound machines Example: pencil sharpener composed of a wheel and axle, inclined plane, and wedge	
6.	Identify structures and functions of the muscular and skeletal systems of the human body.	Human Body - Investigations 1-4 Teacher's Guide
7.	Describe the life cycle of plants, including seed, seed germination, growth, and reproduction.	Plant Growth - Lessons 2-7, 10-12, 16 Teacher's Guide

	<ul style="list-style-type: none"> <li>• Describing the role of plants in a food chain.</li> </ul>	Plant Growth Lesson 9 Teacher's Guide, voc. Food Chain needs to be added.
	<ul style="list-style-type: none"> <li>• Identifying plant and animal cells</li> </ul>	Plant Growth - Lesson 13 Presenter's Guide
	<ul style="list-style-type: none"> <li>• Describing how plants occupy space and use light, nutrients, water, and air</li> </ul>	Plant Growth - Lessons 3-7 Teacher's Guide
	<ul style="list-style-type: none"> <li>• Classifying plants according to their features Examples: evergreen or deciduous, flowering or nonflowering</li> </ul>	Plant Growth Lesson 10 Teacher's Guide and Presenter's Guide
	<ul style="list-style-type: none"> <li>• Identifying helpful and harmful effects of plants Examples: helpful-provide food, control erosion; harmful-cause allergic reactions, produce poisons</li> </ul>	Plant Growth - Lesson 11 Presenter's Guide
	<ul style="list-style-type: none"> <li>• Identifying how bees pollinate flowers</li> </ul>	Plant Growth Lessons 8-9 Teacher's Guide
	<ul style="list-style-type: none"> <li>• Identifying photosynthesis as the method used by plants to produce food</li> </ul>	Plant Growth - Lesson 4 Presenter's Guide
8.	Identify how organisms are classified in the Animalia and Plantae kingdoms.	Plant Growth - Lesson 10 Teacher's Guide and Presenter's Guide.
9.	Describe how fossils provide evidence of prehistoric plant life Example: plant fossils in coal or shale providing evidence of existence of prehistoric ferns	Earth Materials - Investigation 1 Part 1- Science Story - Written in Stone Investigation 4 Project Examples
10.	Determine habitat conditions that support plant growth and survival. Examples: deserts support cacti, wetlands support ferns and mosses	Plant Growth - Lesson 16 Teachers Guide Extensions and Presenter's Guide
11.	Describe Earth's layers, including inner and outer cores, mantle, and crust	Earth Materials - Investigation 2 - Background Teacher's Guide
	<ul style="list-style-type: none"> <li>• Classifying rocks and minerals by characteristics, including streak, color, hardness, magnetism, luster, and texture</li> </ul>	Earth Materials - Investigation 2 Parts 1,2 Magnetism is not covered. Earth Materials Investigation 4 Background for luster, color, and hardness.
12.	Identify conditions that result in specific weather phenomena, including thunderstorms, tornadoes, and hurricanes.	
	<ul style="list-style-type: none"> <li>• Identifying cloud types associated with specific weather patterns</li> </ul>	

	<ul style="list-style-type: none"> <li>Identifying positive and negative effects of weather phenomena Examples: positive - flooding deposits good soil when waters recede, negative - flooding kills crops</li> </ul>	
	<ul style="list-style-type: none"> <li>Identifying technology used to record and predict weather, including thermometers, barometers, rain gauges, anemometers, and satellites</li> </ul>	
	<ul style="list-style-type: none"> <li>Explaining symbols shown on a weather map</li> </ul>	
	<ul style="list-style-type: none"> <li>Organizing weather data into tables or charts</li> </ul>	
13.	Describe ways to sustain natural resources, including recycling, reusing, conserving, and protecting the environment.	Earth Materials - Lesson 4 Science Stories: Treasure Underfoot, X Marks the Spot, Mining for Minerals
	<ul style="list-style-type: none"> <li>Recognizing the impact of society on human health and environmental conditions</li> </ul>	
14.	Describe the position of Earth, the moon, and the sun during the course of a day or month.	
	<ul style="list-style-type: none"> <li>Describing various forms of technology used in observing Earth and its moon</li> </ul>	