Third Grade Science Content Standards and Objectives

Standard 1:	Nature of Science	
SC.S.3.1	Students will • demonstrate an understanding of the history and nature of science as a human endeavor encompassing the contributions of diverse cultures, scientists, and careers. • demonstrate the abilities and understanding necessary to do scientific inquiry. • demonstrate the ability to think and act as scientists by engaging in active inquiries and investigations, while incorporating hands-on activities.	
Objectives	**Students will**	**PLT Activity and Page**
SC.O.3.1.01	recognize that scientific explanations may lead to new discoveries (e.g., new knowledge leads to new questions).	#6 Picture This! p. 34
SC.O.3.1.02	study the lives and discoveries of scientists of different cultures and backgrounds.	
SC.O.3.1.03	explore science careers in the community.	
SC.O.3.1.04	demonstrate curiosity, initiative and creativity by planning and conducting simple investigations.	#1 The Shape of Things p. 17 #2 Get in Touch with Trees p. 20 #3 Peppermint Beetle p. 23 #4 Sounds Around p. 26 #6 Picture This! p. 34 #7 Habitat Pen Pals p. 37
SC.O.3.1.05	recognize that developing solutions to problems takes time, patience and persistence through individual and cooperative ventures.	
SC.O.3.1.06	support statements with facts found through research from various sources, including technology.	#4 Sounds Around p. 26
SC.O.3.1.07	use scientific instruments, technology, and everyday materials to investigate the natural world.	#1 The Shape of Things p. 17 #2 Get in Touch with Trees p. 20
SC.O.3.1.08	use safe and proper techniques for handling, manipulating and caring for science materials (e.g., follow safety rules, maintain a clean work area, or treat living organisms humanely).	

SC.O.3.1.09	apply mathematical skills and use metric units in measurements.	
SC.O.3.1.10	interpret data presented in a table, graph, map or diagram and use it to answer questions and make predictions and inferences based on patterns of evidence.	#1 The Shape of Things p. 17 #6 Picture This! p. 34
SC.O.3.1.11	Identify and control variables.	#3 Peppermint Beetle p. 23
Standard 2:	Content of Science	
SC.S.3.2	Students will demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories, and models as delineated in the objectives. demonstrate an understanding of the interrelationships among physics, chemistry, biology and the earth and space sciences. apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.	
Objectives	Students will	**PLT Activity and Page**
SC.O.3.2.01	identify the structures of living things, including their systems and explain their functions.	#6 Picture This! p. 34 #8 The Forest Of S.T. Shrew p. 40 8. The
SC.O.3.2.02	observe, measure and record changes in living things (e.g., growth and development, or variations within species).	#4 Sounds Around p. 26
SC.O.3.2.03	compare physical characteristics and behaviors of living organisms and explain how they are adapted to a specific environment (e.g., beaks and feet in birds, seed dispersal, camouflage, or different types of flowers).	#2 Get in Touch with Trees p. 20 #6 Picture This! p. 34 #7 Habitat Pen Pals p. 37 7. H
SC.O.3.2.04	observe and describe relationships among organisms and predict the effect of adverse factors.	#6 Picture This! p. 34 #7 Habitat Pen Pals p. 37
SC.O.3.2.05	relate the buoyancy of an object to its density.	
SC.O.3.2.06	identify physical and chemical properties.	
SC.O.3.2.07	relate changes in states of matter to changes in temperature.	
SC.O.3.2.08	investigate the dissolving of solids in liquids.	

SC.O.3.2.09	investigate the reflection and refraction of light by objects.	
SC.O.3.2.10	relate how the color of an object is based upon the reflection of light.	
SC.O.3.2.11	recognize that it takes work to move objects over a distance.	
SC.O.3.2.12	examine the relationships between speed, distance, and time.	
SC.O.3.2.13	recognize that the greater a force is exerted on an object, the greater the change of its motion.	
SC.O.3.2.14	identify examples of potential and kinetic energy.	
SC.O.3.2.15	identify fossils as a record of time.	
SC.O.3.2.16	explore erosion of different materials by water and wind (e.g., sand, soil, or rocks).	
SC.O.3.2.17	describe how volcanoes and earthquakes affect the Earth.	
SC.O.3.2.18	recognize the relative movement of the Earth and moon in relation to the sun.	
SC.O.3.2.19	describe the similarities and differences among the planets.	
SC.O.3.2.20	identify properties of minerals and recognize that rocks are composed of different minerals.	
SC.O.3.2.21	explain how igneous, sedimentary and metamorphic rocks are formed.	
SC.O.3.2.22	identify geographical features using a model or map.	
SC.O.3.2.23	compare and contrast the layers of the Earth and their various features.	
Standard 3:	Application of Science	
SC.S.3.3	Students will identify how the parts of a system interact. recognize and use models as representations of real things. observe and identify patterns of change, consistency or regularity within the environment. demonstrate the ability to utilize technology to gather and organize data to communicate designs, results and conclusions. identify that a solution to a problem often creates new problems. demonstrate the ability to listen to, be tolerant of, and evaluate the impact of different points of view on health, population, resources and environmental practices while working in collaborative groups.	
Objectives	Students will	**PLT Activity and Page**

SC.O.3.3.01	identify that systems are made of parts that interact with one another.	#7 Habitat Pen Pals p. 37 #8 The Forest Of S.T. Shrew p. 40
SC.O.3.3.02	use models as representations of real things.	
SC.O.3.3.03	observe that changes occur gradually, repetitively, or randomly within the environment and question causes of changes.	#5 Poet-Tree p. 31 #8 The Forest Of S.T. Shrew p. 40
SC.O.3.3.04	given a set of objects, group or order the objects according to an established scheme.	#1 The Shape of Things p. 17 #7 Habitat Pen Pals p. 37
SC.O.3.3.05	given a set of events, objects, shapes, designs, or numbers, formulate patterns of constancy or regularity.	
SC.O.3.3.06	cite examples of the uses of science and technology in common daily events and in the community.	
SC.O.3.3.07	explain a simple problem and identify a specific solution describing the use of tools and/or materials to solve the problem or to complete the task.	
SC.O.3.3.08	recognize that a solution to one scientific problem often creates new problems (e.g., recycling, pollution, conservation, or waste disposal).	
SC.O.3.3.09	listen to and be tolerant of different viewpoints by engaging in collaborative activities and be willing to modify ideas when new and valid information is presented.	#2 Get in Touch with Trees p. 20 #13 We All Need Trees p. 65
SC.O.3.3.10	develop respect and responsibility for the environment by engaging in conservation practices.	#4 Sounds Around p. 26 #13 We All Need Trees p. 65 #15 A Few Of My Favorite Things p. 75
SC.O.3.3.11	describe how modern tools and appliances have positively and/or negatively impacted their daily lives.	