



This document is designed to help North Carolina educators teach the Essential Standards (Standard Course of Study). NCDPI staff are continually updating and improving these tools to better serve teachers.

First Grade Science
 2009-to-2004 Standards Crosswalk

This document is a general comparison of the current 2004 Science Standard Course of Study and the new 2009 Science Essential Standards. It provides initial insight into sameness and difference between these two sets of standards. This document is not intended to answer all questions about the nuance of the new standards versus the old - in fact, we imagine you will develop questions as you do a close reading of the new standards. Please send the science section of NC DPI any thoughts, feedback, questions and ideas about additional resources that would help you start preparing to teach the Essential Standards. Email Beverly Vance at bvance@dpi.state.nc.us.

Important Note: The current 2004 SCOS will continue to be the operational standards in the 2010-11 and 2011-12 school years as resource materials are developed to support the new Science Essential Standards, professional development is conducted and assessments are designed to align to the new Science Essential Standards. We expect the new Essential Standards to be taught and assessed in schools for the first time in the 2012-13 school year. That said, we are providing Essential Standards resources now and over the next two-years so that schools and teachers can get a head start on internalizing and planning to teach the new standards.

2009 Essential Standards			2004 NC SCOS			Comments
Strand	Objective	Essential Standard	Goal	Objective	Text of objective	
Physical Science: Forces in Motion		Understand how forces (pushes or pulls) affect the motion of an object.	Balance, Motion and Weighing of Objects	4.01	Describe different ways in which objects can be moved.	
	1.P.1.1	Explain the importance of a push or pull to changing the motion of an object.		4.02	Observe that movement of an object can be affected by pushing or pulling.	
	1.P.1.2	Explain how some forces (pushes and pulls) can be used to make things move without touching them, such as magnets.		4.03	Investigate and observe that objects can move steadily or change direction.	
				4.04	Observe and describe balance as a function of position and weight.	

2009 Essential Standards			2004 NC SCOS			Comments
Strand	Objective	Essential Standard	Goal	Objective	Text of objective	
	I.P.1.3	Predict the effect of a given force on the motion of an object, including balanced forces.		4.05	Describe and observe systems that are unstable and modify them to reach equilibrium.	
Earth Science: Earth in the Universe	Recognize the features and patterns of the earth/moon/sun system as observed from Earth.					
	1.E.1.1	Recognize differences in the features of the day and night sky and apparent movement of objects across the sky as observed from Earth.				
	1.E.1.2	Recognize patterns of observable changes in the Moon's appearance from day to day.				
Earth Science: Earth Systems, Structures and Processes	Understand the physical properties of Earth materials that make them useful in different ways.		Solid Earth Materials	2.01	Describe and sort a variety of earth materials based on their properties: <ul style="list-style-type: none"> • Color • Hardness • Shape • Size 	
	1.E.2.1	Summarize the physical properties of Earth materials, including rocks, minerals, soils, and water, that make them useful in different ways.		2.02	Describe rocks and other earth materials in more than one way, using student-made rules.	
				2.05	Explore where useful earth materials are found and how they are used.	
			Pr op	3.01	Describe the differences in the properties of solids and liquids.	
	1.E.2.2	Compare the properties of soil samples from different places relating their capacity to retain water, nourish and support the growth of certain plants.	Solid Earth Materials	2.03	Observe the various components that combine to make soil.	
				2.04	Compare the components of soil samples from different places.	

2009 Essential Standards			2004 NC SCOS		Comments
Strand	Objective	Essential Standard	Goal	Objective	
Life Science: Ecosystems		Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive.	Needs of Living Organisms	1.04	Identify local environments that support the needs of common North Carolina plants and animals.
	1.L.1.1	Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.		1.05	Discuss the wide variety of living things on Earth.
	1.L.1.2	Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.		1.01	Investigate the needs of a variety of different plants: <ul style="list-style-type: none"> • Air • Water • Light • Space
				1.02	Investigate the needs of a variety of different animals: <ul style="list-style-type: none"> • Air • Water • Food • Shelter • Space
					1.03
1.L.1.3	Summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there. (e.g., reuse or recycle products to avoid littering.)				
Life Science:		Summarize the needs of living organisms for energy and growth.	Needs of Living	1.01	Investigate the needs of a variety of different plants: <ul style="list-style-type: none"> • Air • Water • Light • Space
	1.L.2.1	Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth.			

2009 Essential Standards			2004 NC SCOS		Comments
Strand	Objective	Essential Standard	Goal	Objective	
		Text of Clarifying objective		Text of objective	
	1.L.2.2	Summarize the basic needs of a variety of different animals (including air, water, and food) for energy and growth.		Investigate the needs of a variety of different animals: <ul style="list-style-type: none"> • Air • Water • Food • Shelter • Space 	

Objective 3.02 not addressed
Objective 3.03 not addressed
Objective 3.04 not addressed
Objective 3.05 not addressed