## NORTH CAROLINA STANDARD COURSE OF STUDY Crosswalk Grade 1 Science

The purpose of this document is to provide a general comparison of the 2009 Grade 1 Science Standard Course of Study and the 2023 Grade 1 Science Standard Course of Study. It provides initial insight into similarities and differences between these two sets of standards. This document is not intended to answer all questions about the nuances of the new 2023 standards versus the previous 2009 standards..

## Grade 1 Science Standards

Note: The 2023 Grade 1 standards and objectives are not intended to be the curriculum, nor do they indicate the whole of a curriculum which will be written by a local public-school unit (PSU) or school. The standards for this course have been developed to serve as the framework which will guide each PSU in the development of the curriculum for Grade 1.

Motion and Stability- Forces and Interactions		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
<i>PS.1.1 Understand how forces (pushes or pulls) affect the motion of an object.</i>	1.P.1 Understand how forces (pushes or pulls) affect the motion of an object.	
PS.1.1.1 Use models to explain the effect of	1.P.1.1 Explain the importance of a push or pull to changing the motion of an object.	
a push or pull on the motion of an object, with or without contact.	1.P.1.2 Explain how some forces (pushes and pulls) can be used to make things move without touching them, such as magnets.	
PS.1.1.2 Carry out investigations to compare the effects of a given force on the motion of	1.P.1.3 Predict the effect of a given force on the motion of an object, including balanced	
an object.	forces.	



Ecosystems- Interactions, Energy, and Dynamics		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
LS.1.1 Understand the basic needs of a variety of plants and animals in different ecosystems.	<ul> <li>1.L.1 Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive.</li> <li>1.L.2 Summarize the needs of living organisms for energy and growth.</li> </ul>	
LS.1.1.1 Obtain, evaluate and communicate information to summarize the needs of different plants and animals.	<ul> <li>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.</li> <li>1.L.2.1 Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth.</li> </ul>	
	1.L.2.2 Summarize the basic needs of a variety of different animals (including air, water, and food) for energy and growth.	
LS.1.1.2 Analyze and interpret data to compare how the needs of plants and animals can be met in different environments.	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.	

Earth's Place in the Universe		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
ESS.1.1 Recognize the features and	1.E.1 Recognize the features and patterns of	
patterns of the earth/moon/sun system as	the earth/moon/sun system as observed from	
observed from Earth.	Earth.	
ESS.1.1.1 Use models to recognize	1.E.1.1 Recognize differences in the features	
differences in the features of the day and	of the day and night sky and apparent	
night sky and apparent movement of objects	movement of objects across the sky as	
across the sky as observed from Earth.	observed from Earth.	



ESS.1.1.2 Analyze and interpret data to	1.E.1.2 Recognize patterns of observable
recognize patterns of observable changes in	changes in the Moon's appearance from day
the moon's appearance from day to day.	to day.

Earth's Systems		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
ESS.1.2 Understand the physical properties of Earth materials.	1.E.2 Understand the physical properties of Earth materials that make them useful in different ways.	
ESS.1.2.1 Obtain, evaluate and communicate information to summarize the physical properties of Earth materials, including rocks, minerals, soils, and water.	1.E.2.1 Summarize the physical properties of Earth materials, including rocks, minerals, soils and water that make them useful in different ways.	
ESS.1.2.2 Carry out investigations to compare the properties of different soil samples from local places relating their capacity to retain water, provide nutrients, and support the growth of plants.	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.	

Earth and Human Activity		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
ESS.1.3 Understand that natural resources are important to humans.	<ul> <li>1.E.2 Understand the physical properties of Earth materials that make them useful in different ways.</li> <li>1.L.1 Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive.</li> </ul>	
ESS.1.3.1 Obtain, evaluate and communicate information to summarize ways in which humans use natural resources.	1.E.2.1 Summarize the physical properties of Earth materials, including rocks, minerals, soils and water that make them useful in different ways.	



ESS.1.3.2 Engage in argument from	1.L.1.3 Summarize ways that humans protect
evidence to explain ways that humans can	their environment and/or improve conditions
protect natural resources in the environment.	for the growth of the plants and animals that
	live there (e.g., reuse or recycle products to
	avoid littering).