NORTH CAROLINA STANDARD COURSE OF STUDY Crosswalk Kindergarten Science

The purpose of this document is to provide a general comparison of the 2009 Kindergarten Science Standard Course of Study and the 2023 Kindergarten 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..

Kindergarten Science Standards

Note: The 2023 Kindergarten 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 Kindergarten.

Matter and its Interactions		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
PS.K.1 Understand how objects are	K.P.2 Understand how objects are described	
described based on their physical	based on their physical properties and how	
properties and how they are used.	they are used.	
PS.K.1.1 Analyze and interpret data to	K.P.2.1 Classify objects by observable	
classify objects by physical properties (size,	physical properties (including size, color,	
color, shape, texture, weight and flexibility).	shape, texture, weight and flexibility).	
PS.K.1.2 Engage in argument from evidence	K.P.2.2 Compare the observable physical	
to summarize how different materials (clay,	properties of different kinds of materials (clay,	
wood, cloth, paper, etc.) are used based on	wood, cloth, paper, etc.) from which objects	
their physical properties.	are made and how they are used.	



Motion and Stability- Forces and Interactions		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
PS.K.2 Understand the positions and motions of objects and organisms observed in the environment.	K.P.1 Understand the positions and motions of objects and organisms observed in the environment.	
PS.K.2.1 Use models to compare the relative position of various objects observed in the classroom and outside using position words such as: in front of, behind, between, on top of, under, above, below, beside.	K.P.1.1 Compare the relative position of various objects observed in the classroom and outside using position words such as: in front of, behind, between, on top of, under, above, below and beside.	
PS.K.2.2 Carry out investigations to illustrate different ways objects and organisms move (to include falling to the ground when dropped): straight, zigzag, round and round, back and forth, fast and slow.	 K.P.1.2 Give examples of different ways objects and organisms move (to include falling to the ground when dropped): Straight Zigzag Round and round Back and forth Fast and slow 	

From Molecules to Organisms		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
LS.K.1 Understand the characteristics of living organisms and nonliving things.	K.L.1 Compare characteristics of animals that make them alike and different from other animals and nonliving things.	
LS.K.1.1 Engage in argument from evidence to summarize the characteristics of living organisms and nonliving things in terms of their: structure, growth, changes, movement, basic needs.	 K.L.1.2 Compare characteristics of living and nonliving things in terms of their: Structure Growth Changes Movement Basic needs 	



LS.K.1.2 Use models to exemplify how	New
animals use their body parts to obtain food	
and other resources, protect themselves, and	
move from place to place.	

Heredity- Inheritance and Variation of Traits		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
LS.K.2 Understand characteristics of	K.L.1 Compare characteristics of animals that	
organisms that make them alike and	make them alike and different from other	
different.	animals and nonliving things.	
LS.K.2.1 Analyze and interpret data to	K.L.1.1 Compare different types of the same	
compare the characteristics of different types	animal (i.e. different types of dogs, different	
of the same animal to determine individual	types of cats, etc.) to determine individual	
similarities and differences.	differences within a particular type of animal.	
LS.K.2.2 Analyze and interpret data to		New
compare the characteristics of different types		
of the same plant to determine individual		
similarities and differences.		

Earth's Systems		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
ESS.K.1 Understand change and	K.E.1 Understand change and observable	
observable patterns of weather that occur	patterns of weather that occur from day to day	
from day to day and throughout the year.	and throughout the year.	
ESS.K.1.1 Analyze and interpret data to	K.E.1.1 Infer that change is something that	
compare changes in the environment due to	happens to many things in the environment	
weather.	based on observations made using one or	
	more of their senses.	
ESS.K.1.2 Use mathematics and	K.E.1.2 Summarize daily weather conditions	
computational thinking to summarize daily	noting changes that occur from day to day	
weather conditions noting changes that occur	and throughout the year.	
from day to day and throughout the year.		

ESS.K.1.3 Obtain, evaluate and	K.E.1.3 Compare weather patterns that occur	
communicate information to compare	from season to season.	
weather patterns that occur from season to		
season.		