

NORTH CAROLINA STANDARD COURSE OF STUDY

Crosswalk

Grade 2 Science

The purpose of this document is to provide a general comparison of the 2009 Grade 2 Science Standard Course of Study and the 2023 Grade 2 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 2 Science Standards

Note: The 2023 Grade 2 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 2.

Matter and its Interactions		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
<i>PS.2.1 Understand properties of solids and liquids and the changes they undergo.</i>	<i>2.P.2 Understand properties of solids and liquids and the changes they undergo.</i>	
PS.2.1.1 Carry out investigations to illustrate examples of matter that can change from a solid to a liquid and from a liquid to a solid by heating and cooling.	2.P.2.1 Give examples of matter that change from a solid to a liquid and from a liquid to a solid by heating and cooling.	
PS.2.1.2 Analyze and interpret data to compare the amount (volume and weight) of water in a container before and after freezing.	2.P.2.2 Compare the amount (volume and weight) of water in a container before and after freezing.	
PS.2.1.3 Analyze and interpret data to compare the amount (volume and weight) of water left in an open container over time to the water left in a closed container.	2.P.2.3 Compare what happens to water left in an open container over time as to water left in a closed container.	

Waves and Their Applications		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
<i>PS.2.2 Understand the relationship between sound and vibrating objects.</i>	<i>2.P.1 Understand the relationship between sound and vibrating objects.</i>	
PS.2.2.1 Carry out investigations to illustrate how sound is produced by vibrating objects and columns of air.	2.P.1.1 Illustrate how sound is produced by vibrating objects and columns of air.	
PS.2.2.2 Use models to summarize the relationship between sound and how sounds are produced and detected by parts of the body that vibrate.	2.P.1.2 Summarize the relationship between sound and objects of the body that vibrate – eardrum and vocal cords.	

From Molecules to Organisms		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
<i>LS.2.1 Understand animal life cycles.</i>	<i>2.L.1 Understand animal life cycles.</i>	
LS.2.1.1 Use models to summarize the life cycle of animals including: birth, developing into an adult, reproducing, aging and death.	2.L.1.1 Summarize the life cycle of animals: <ul style="list-style-type: none"> • Birth • Developing into an adult • Reproducing • Aging and death 	
LS.2.1.2 Obtain, evaluate and communicate information to compare life cycles of different animals.	2.L.1.2 Compare life cycles of different animals such as, but not limited to, mealworms, ladybugs, crickets, guppies or frogs.	

Heredity- Inheritance and Variation of Traits		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
<i>LS.2.2 Understand that organisms differ from or are similar to their parents and other offspring based on characteristics of the organism.</i>	<i>2.L.2 Remember that organisms differ from or are similar to their parents based on the characteristics of the organism.</i>	
LS.2.2.1 Obtain, evaluate, and communicate information to summarize ways in which animals closely resemble their parents and ways they are different.	2.L.2.1 Identify ways in which many plants and animals closely resemble their parents in observed appearance and ways they are different.	
LS.2.2.2 Analyze and interpret data to illustrate variations among offspring of the same parents.	2.L.2.2 Recognize that there is variation among individuals that are related.	

Earth's Systems		
2023 Standards/Objectives	2009 Essential Standards/Clarifying Objectives	Notes
<i>ESS2.1 Understand patterns of weather and factors that affect weather.</i>	<i>2.E.1 Understand patterns of weather and factors that affect weather.</i>	
ESS.2.1.1 Obtain, evaluate, and communicate information to summarize how energy from the sun serves as a source of light and warms the land, air, and water.	2.E.1.1 Summarize how energy from the sun serves as a source of light that warms the land, air and water.	
ESS.2.1.2 Use mathematics and computational thinking to summarize weather conditions (temperature, wind direction, wind speed, precipitation).	2.E.1.2 Summarize weather conditions using qualitative and quantitative measures to describe: <ul style="list-style-type: none"> • Temperature • Wind direction • Wind speed • Precipitation 	

ESS.2.1.3 Carry out investigations to collect data and compare weather patterns that occur over time and relate observable patterns to time of day and time of year.	2.E.1.3 Compare weather patterns that occur over time and relate observable patterns to time of day and time of year.	
ESS.2.1.4 Obtain, evaluate and communicate information to recognize the tools scientists use for observing, recording, and predicting weather changes from day to day and during the season.	2.E.1.4 Recognize the tools that scientists use for observing, recording, and predicting weather changes from day to day and during the seasons.	