



Public Schools of North Carolina  
State Board of Education | Department of Public Instruction

**Crosswalk for the 2020 North Carolina K12 Computer Science Standards aligned with Code.org *CS Fundamentals*.**

This document is designed to help North Carolina educators teach the NC Standard Course of Study for Computer Science.

This document is a general alignment of the 2020 NC K12 Computer Science Standards which are based on the 2017 Computer Science Teachers Association Computer Science Standards to a common national curriculum.

# Kindergarten through Fifth Grade

## Mapped to *Code.org CS Fundamentals*

NC Standard	CS Fundamentals Course					
	A	B	C	D	E	F
<b>K2-CS-01</b> Choose appropriate devices to perform a variety of classroom tasks.						
<b>K2-CS-02</b> Describe the function of common physical components of computing systems (hardware) with appropriate terminology.	✓					
<b>K2-CS-03</b> Operate appropriate software to perform a variety of tasks.		✓				
<b>K2-CS-04</b> Describe basic hardware and software problems with accurate terminology.	✓					
<b>K2-NI-01</b> Illustrate how information is broken down into smaller pieces and can be reassembled.						✓
<b>K2-NI-02</b> Apply knowledge of what passwords are and why we use strong passwords to protect devices and information from unauthorized access.		✓	✓			
<b>K2-NI-03</b> Discover your digital footprint and how personal information can be protected.				✓	✓	✓
<b>K2-DA-01</b> Store, copy, search, retrieve, modify, and delete information using a computing device.			✓			
<b>K2-DA-02</b> Define information stored on a computing device as data.			✓			
<b>K2-DA-03</b> Collect and present the same data in various visual formats.			✓			
<b>K2-DA-04</b> Make predictions with patterns in data visualizations.			✓			

<b>K2-AP-01</b> Model daily processes with algorithms to complete tasks.	✓	✓				
<b>K2-AP-02</b> Demonstrate how programs store and manipulate data by using numbers or other symbols to represent information.	✓	✓	✓	✓		
<b>K2-AP-03</b> Develop programs with sequences and simple loops to express ideas or address a problem.	✓	✓	✓	✓		
<b>K2-AP-04</b> Decompose the steps needed to solve a problem into a precise sequence of instructions.	✓	✓	✓	✓		
<b>K2-AP-05</b> Develop plans that describe a program’s sequence of events, goals, and expected outcomes.	✓	✓	✓	✓		
<b>K2-AP-06</b> Give attribution when using the ideas and creations of others while developing programs.			✓	✓		
<b>K2-AP-07</b> Identify and debug errors in an algorithm or program that includes sequences and simple loops.	✓	✓	✓	✓		
<b>K2-AP-08</b> Using correct terminology, describe steps taken and choices made during the iterative process of program development			✓	✓		
<b>K2-IC-01</b> Compare how people live and work before and after the implementation or adoption of new computing technology.		✓				
<b>K2-IC-02</b> Select software that meets the diverse needs and preferences for the technology individuals use in the classroom.		✓				
<b>K2-IC-03</b> Work respectfully and responsibly with others online.	✓	✓	✓			
<b>K2-IC-04</b> Model responsible login and logoff procedures on all devices.	✓	✓	✓			
<b>35-CS-01</b> Evaluate the features available on digital devices to perform a variety of classroom tasks.						
<b>35-CS-02</b> Model how computer hardware and software work together as a system to accomplish tasks.				✓		

<b>35-CS-03</b> Determine potential solutions to solve simple hardware and software problems using common troubleshooting strategies.					✓	
<b>35-NI-01</b> Model how information is broken down into smaller pieces, transmitted as packets through multiple devices over networks and the Internet, and reassembled at the destination.						✓
<b>35-NI-02</b> Explain your digital footprint and how personal information can be protected.				✓	✓	✓
<b>35-DA-01</b> Identify the type of data encoded in a file based on file extension.						
<b>35-DA-02</b> Illustrate the process of file management and version control.						
<b>35-DA-03</b> Organize and present collected data visually to highlight relationships and support a claim.						✓
<b>35-DA-04</b> Communicate using data to highlight or predict outcomes.						✓
<b>35-AP-01</b> Create multiple algorithms for the same task to determine which is the most accurate and efficient.					✓	✓
<b>35-AP-02</b> Create programs that use variables to store and modify data.				✓		✓
<b>35-AP-03</b> Construct programs that include sequences.			✓	✓	✓	✓
<b>35-AP-04</b> Construct programs using simple loops.			✓	✓	✓	✓
<b>35-AP-05</b> Construct programs that implement conditionals.			✓	✓	✓	✓
<b>35-AP-06</b> Decompose problems into smaller, manageable, subproblems to facilitate the program development process.				✓	✓	✓
<b>35-AP-07</b> Modify, remix, or incorporate portions of an existing program into one's own work.				✓	✓	✓
<b>35-AP-08</b> Apply an iterative process to the development of a program by including diverse perspectives and considering user preferences.					✓	✓

<b>35-AP-09</b> Give appropriate attribution when creating or remixing programs while respecting intellectual property rights.					✓	✓
<b>35-AP-10</b> Identify and debug errors in an algorithm or program to ensure it runs as intended.				✓	✓	✓
<b>35-AP-11</b> Take on varying roles, with teacher guidance, when collaborating with peers during the design, implementation, and review stages of program development.					✓	✓
<b>35-AP-12</b> Describe choices made during program development using code comments, presentations, and demonstrations.						✓
<b>35-IC-01</b> Compare computing technologies that have changed the world and how they both influence and are influenced by cultural practices.		✓			✓	✓
<b>35-IC-02</b> Explore the tools that can be used to improve accessibility and usability of technology products for the diverse needs and wants of users.					✓	
<b>35-IC-03</b> Seek diverse perspectives with collaboration for the purpose of improving computational artifacts.					✓	
<b>35-IC-04</b> Exhibit positive digital citizenship and social responsibility.						
<b>35-IC-05</b> Utilize public domain or creative commons media, and refrain from copying or using material created by others without permission.					✓	