Legend for Identifiers

Unique Numbering System for the 2016 K–12 Computer Science Learning Standards

To help organize and track each individual standard, a unique identifier was developed. An example appears below:

Grades	Identifier	Computer Science K–12 Learning Standard	Framework Concept	Framework Practice
9–10	3A-A-2-1	Design and develop a software artifact working in a team.	Algorithms and Programming	Collaborating

Use the following legend to interpret the unique identifier for each Computer Science K–12 Learning Standard:

The identifier code corresponds to: **Level – Concept – Practice – Identifier**		
Identifier Code		**Key**
Levels	1A	Grades K–2
	1B	Grades 3–5
	2	Grades 6–8
	3A	Grades 9–10
	3B	Grades 11–12
Concepts	A	Algorithms and Programming
	C	Computing Systems
	D	Data and Analysis
	I	Impacts of Computing
	N	Networks and the Internet
Practices	1	Fostering an Inclusive Computing Culture
	2	Collaborating
	3	Recognizing and Defining Computational Problems
	4	Developing and Using Abstractions
	5	Creating Computational Artifacts
	6	Testing and Refining
	7	Communicating about Computing

Figure 4: Standards Identifier Code - Interim Computer Science Teachers Association K–12 Computer Science Standards (2016) Retrieved from http://www.csteachers.org

K–2	Level 1A
1A-A-7-1	Give credit when using code, music, or pictures (for example) that were created by others.
1A-A-5-2	Construct programs, to accomplish a task or as a means of creative expression, which include sequencing, events, and simple loops, using a block-based visual programming language, both independently and collaboratively (e.g., pair programming).
1A-A-5-3	Plan and create a design document to illustrate thoughts, ideas, and stories in a sequential (step-by-step) manner (e.g., story map, storyboard, sequential graphic organizer).
1A-A-4-4	Use numbers or other symbols to represent data (e.g., thumbs up/down for yes/no, color by number, arrows for direction, encoding/decoding a word using numbers or pictographs).
1A-A-3-5	Decompose (break down) a larger problem into smaller sub-problems with teacher guidance or independently.
1A-A-3-6	Categorize a group of items based on the attributes or actions of each item, with or without a computing device.
1A-A-3-7	Construct and execute algorithms (sets of step-by-step instructions) that include sequencing and simple loops to accomplish a task, both independently and collaboratively, with or without a computing device.
1A-A-6-8	Analyze and debug (fix) an algorithm that includes sequencing and simple loops, with or without a computing device.
1A-C-7-9	Identify and use software that controls computational devices (e.g., use an app to draw on the screen, use software to write a story or control robots).
1A-C-7-10	Use appropriate terminology in naming and describing the function of common computing devices and components (e.g., desktop computer, laptop computer, tablet device, monitor, keyboard, mouse, printer).
1A-C-6-11	Identify, using accurate terminology, simple hardware and software problems that may occur during use (e.g., app or program not working as expected, no sound, device won't turn on).
1A-D-7-12	Collect data over time and organize it in a chart or graph in order to make a prediction.
1A-D-4-13	Use a computing device to store, search, retrieve, modify, and delete information and define the information stored as data.
1A-D-4-14	Create a model of an object or process in order to identify patterns and essential elements (e.g., water cycle, butterfly life cycle, seasonal weather patterns).
1A-I-7-15	Compare and contrast examples of how computing technology has changed and improved the way people live, work, and interact.
1A-N-2-16	Use computers or other computing devices to connect with people using a network (e.g., the Internet) to communicate, access, and share information as a class.
1A-N-7-17	Use passwords to protect private information and discuss the effects of password misuse