

STANDARD	Core Concept	Sub-Concept	Grade Level	Grade Level Series in Sub-Concept	Practice 1	Practice 2	Practice 3	Identifier	Providers
Model daily processes by creating and following algorithms to complete tasks.	Computational Thinking & Programming	Algorithms	K-2	1	4.4			1A-CT-A-1	Code.org - Fundamentals Creative Computing With Scratch - CCS K-2 Creative Computing With Scratch - CCS 3-8: BootUp Curriculum URI - ICDS
Develop simple programs with sequences and simple repetitions		Control Structures	K-2	1	5.2			1A-CT-C-1	Code.org - Fundamentals Creative Computing With Scratch - CCS K-2 Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - Launch URI - ICDS
Develop a plan that describes a what a computational artifact should look like and how it should perform.	Computational Thinking & Programming	Computational Design	K-2	1	5.1	7.2		1A-CT-CD-1	Code.org - Discoveries Creative Computing With Scratch - CCS K-2 PLTW - Launch URI - ICDS
Identify a task that includes sequences and simple loops.	Computational Thinking & Programming	Computational Design	K-2	2	6.2			1A-CT-CD-2	Creative Computing With Scratch - CCS K-2 PLTW - Launch URI - ICDS
Model real-world objects and/or processes that can be represented by various types of data.		Data Structures and Data Types	K-2	1	4.4			1A-CT-D-1	Code.org - Discoveries Creative Computing With Scratch - CCS K-2 Creative Computing With Scratch - CCS 3-8: BootUp Curriculum Bootstrap - Algebra Bootstrap - Data Science PLTW - Launch URI - ICDS
Decompose a task into a set of smaller tasks.	Computational Thinking & Programming	Modularity	K-2	1	3.2			1A-CT-M-1	Creative Computing With Scratch - CCS K-2 Creative Computing With Scratch - CCS 3-8: BootUp Curriculum Bootstrap - Algebra Bootstrap - Data Science PLTW - Launch URI - ICDS
Model real-world data and how it is stored.	Computational Thinking & Programming	Variables	K-2	1	5.2			1A-CT-V-1	Bootstrap - Data Science URI - ICDS
Identify the inputs and outputs of a computer system. Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware). Describe the Internet as a place to share and find information.	Computing Systems & Networks	Human-Computer Interfaces	K-2	1	7.2			1A-CSN-H-1	Code.org - Fundamentals
Describe basic hardware and software problems using appropriate terminology.		Hardware and Software	K-2	1	7.2			1A-CSN-HS-1	Code.org - Fundamentals Code.org - Discoveries
Compare and refine multiple algorithms for the same task and determine which is more appropriate to complete the task.		Networks and the Internet	K-2	1	7.2			1A-CSN-N-1	Code.org - Discoveries URI - ICDS
Describe basic hardware and software problems using appropriate terminology.	Computing Systems & Networks	Troubleshooting	K-2	1	6.2	7.2		1A-CSN-T-1	Code.org - Discoveries URI - ICDS
Compare and refine multiple algorithms for the same task and determine which is more appropriate to complete the task.	Computational Thinking & Programming	Algorithms	3-5	1	3.3	6.3		1B-CT-A-1	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - Launch URI - ICDS
Create programs that combine sequences, loops, conditionals, and/or events.	Computational Thinking & Programming	Control Structures	3-5	1	5.2			1B-CT-C-1	Code.org - Discoveries Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - Launch URI - ICDS
Use an iterative process to plan the development of a computational artifact by including others' perspectives and considering user preferences.	Computational Thinking & Programming	Computational Design	3-5	1	1.1	5.1		1B-CT-CD-1	Code.org - Fundamentals Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - Launch URI - ICDS
Debug errors in an algorithm or program that includes sequences and simple loops.	Computational Thinking & Programming	Computational Design	3-5	2	6.2			1B-CT-CD-2	Code.org - Fundamentals Creative Computing With Scratch - CCS K-2 Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - Launch URI - ICDS
Describe steps taken and choices made during the process of creating a computational artifact.	Computational Thinking & Programming	Computational Design	3-5	3	7.2			1B-CT-CD-3	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum Bootstrap - Algebra Bootstrap - Data Science PLTW - Launch URI - ICDS
Identify real world examples of data structures and data types.	Computational Thinking & Programming	Data Structures and Data Types	3-5	1	3.1			1B-CT-D-1	Code.org - Discoveries PLTW - Launch URI - ICDS
Continually decompose problems into smaller subtasks until each subtask is a manageable set of basic operations.	Computational Thinking & Programming	Modularity	3-5	1	3.2			1B-CT-M-1	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum Bootstrap - Algebra Bootstrap - Data Science PLTW - Launch PLTW - CSE URI - ICDS
Create computational artifacts by incorporating existing modules into one's own work to solve a problem.	Computational Thinking & Programming	Modularity	3-5	2	4.2	5.3		1B-CT-M-2	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - Launch URI - ICDS
Create programs that use variables	Computational Thinking & Programming	Variables	3-5	1	5.2			1B-CT-V-1	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - Launch URI - ICDS
Describe how people interact with the various parts of computing systems to accomplish tasks.	Computing Systems & Networks	Human-Computer Interfaces	3-5	1	7.2			1B-CSN-H-1	PLTW - Launch
Model how computer hardware and software work together as a system to accomplish tasks.	Computing Systems & Networks	Hardware and Software	3-5	1	4.4			1B-CSN-HS-1	PLTW - Launch
Model how information is broken down into smaller pieces of data, transmitted as packets through multiple devices over networks and the Internet, and reassembled at the destination.	Computing Systems & Networks	Networks and the Internet	3-5	1	4.4			1B-CSN-N-1	Code.org - Fundamentals PLTW - Launch
Determine potential solutions to solve simple hardware and software problems using common troubleshooting strategies.	Computing Systems & Networks	Troubleshooting	3-5	1	6.2			1B-CSN-T-1	Code.org - Fundamentals
Describe the risks of sharing personal information, on websites or other public forums.	Cybersecurity	Risks	3-5	1	8.2			1B-CY-R-1	PLTW - Launch
Describe ways personal information can be obtained digitally.	Cybersecurity	Risks	3-5	2	8.2			1B-CY-R-2	PLTW - Launch
Describe the risks of others using one's personal resources or devices.	Cybersecurity	Risks	3-5	3	8.1	8.2		1B-CY-R-3	PLTW - Launch
Identify and describe unusual data or behaviors of applications and devices that should be reported to a responsible adult.	Cybersecurity	Response	3-5	1	8.1			1B-CY-RP-1	Code.org - Discoveries Code.org - Discoveries PLTW - Launch
Explain individual actions that protect personal electronic information and devices.	Cybersecurity	Safeguards	3-5	1	8.1			1B-CY-S-1	Code.org - Discoveries Code.org - Discoveries PLTW - Launch
Organize and present collected data to highlight relationships and support a claim.	Data & Analysis	Collection, Visualization, Transformation	3-5	1	4.1	7.1		1B-DA-CVT-1	Bootstrap - Data Science PLTW - Launch URI - ICDS
Use data to highlight or propose cause-and-effect relationships, predict outcomes, or communicate an idea.	Data & Analysis	Inferences and Models	3-5	1	5.1	7.1		1B-DA-IM-1	Bootstrap - Data Science PLTW - Launch URI - ICDS
Store, copy, search, retrieve, modify, and delete data using a computing device.	Data & Analysis	Storage	3-5	1	2.4	3.2		1B-DA-ST-1	Bootstrap - Data Science PLTW - Launch URI - ICDS
Use software tools to create and share multimedia artifacts.	Digital Literacy	Creation and Use	3-5	1	8.1			1B-DL-CU-1	Bootstrap - Algebra PLTW - Launch URI - ICDS
Conduct and refine multi-criteria searches over digital information.	Digital Literacy	Searching Digital Information	3-5	1	8.1			1B-DL-SDI-1	URI - ICDS
Describe the different high-level tasks that are common to software tools that students use.	Digital Literacy	Understanding Software Tools	3-5	1	8.1	8.3		1B-DL-US-1	PLTW - Launch URI - ICDS
Compare and contrast computing technologies that have changed the world, and express how those technologies influence, and are influenced by, cultural practices.	Responsible Computing & Society	Culture	3-5	1	3.1			1B-RC-CU-1	Code.org - Fundamentals
Identify ways to improve the accessibility and usability of technology products for the diverse needs and wants of users.	Responsible Computing & Society	Culture	3-5	2	1.2			1B-RC-CU-2	PLTW - Launch
Seek diverse perspectives for the purpose of improving computational artifacts.	Responsible Computing & Society	Social Interactions	3-5	1	1.1			1B-RC-SI-1	PLTW - Launch
Incorporate public domain or creative commons media into a digital artifact, and refrain from copying or using material created by others without permission.	Responsible Computing & Society	Safety, Law & Ethics	3-5	1	7.3			1B-RC-SLE-1	Code.org - Fundamentals Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - Gateway URI - ICDS
Use diagrams and/or pseudocode to plan, analyze, solve and/or code complex problems as algorithms.	Computational Thinking & Programming	Algorithms	6-8	1	4.1	4.4		2-CT-A-1	Code.org - Fundamentals Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - Gateway URI - ICDS

STANDARD	Core Concept	Sub-Concept	Grade Level	Grade Level Series in Sub-Concept	Practice 1	Practice 2	Practice 3	Identifier	Providers
Design programs that combine control structures, including nested loops and compound conditionals. Seek and incorporate feedback from team members and users to refine a solution that meets user needs.	Computational Thinking & Programming	Control Structures	6-8	1	5.1	5.2		2-CT-C-1	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - Gateway
		Computational Design	6-8	1	1.1	2.3		2-CT-CD-1	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - Gateway
Test and debug a program to ensure it runs as intended.	Computational Thinking & Programming	Computational Design	6-8	2	6.1	6.2		2-CT-CD-2	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum Bootstrap - Algebra Bootstrap - Data Science PLTW - Gateway URI - ICDS
Describe choices made during development of computational artifacts. Organize data into an appropriate data structure in a program.	Computational Thinking & Programming	Computational Design	6-8	3	7.2			2-CT-CD-3	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum Bootstrap - Algebra Bootstrap - Data Science PLTW - Gateway URI - ICDS
		Data Structures and Data Types	6-8	1	5.1			2-CT-D-1	PLTW - Gateway URI - ICDS
Decompose computational problems to facilitate the design and implementation of programs.	Computational Thinking & Programming	Modularity	6-8	1	3.3	5.1		2-CT-M-1	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum Bootstrap - Algebra Bootstrap - Data Science PLTW - Gateway URI - ICDS
Create procedures with parameters to organize code and make it easier to reuse.	Computational Thinking & Programming	Modularity	6-8	2	4.1	4.3		2-CT-M-2	Code.org - Discoveries Creative Computing With Scratch - CCS 3-8: BootUp Curriculum Bootstrap - Algebra Bootstrap - Data Science PLTW - Gateway URI - ICDS
Create clearly named variables that represent different data. Perform operations on data stored in variables. Identify improvements to the design of computing devices, based on an analysis of how users interact with the devices.	Computational Thinking & Programming	Variables	6-8	1	5.1	5.2		2-CT-V-1	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum Bootstrap - Algebra Bootstrap - Data Science PLTW - Gateway URI - ICDS
Design projects that combine hardware and software components to collect and use data to perform a function.	Computing Systems & Networks	Human-Computer Interfaces	6-8	1	1.1			2-CSN-H-1	PLTW - Gateway
Model the role of protocols in transmitting data across networks and the Internet.	Computing Systems & Networks	Hardware and Networks and the Internet	6-8	1	5.1			2-CSN-HS-1	PLTW - Gateway
Identify and fix problems with computing devices and their components using a systematic troubleshooting method or guide.	Computing Systems & Networks	Troubleshooting	6-8	1	6.2			2-CSN-T-1	Code.org - Discoveries PLTW - Gateway
Describe tradeoffs between allowing information to be public and keeping information private and secure.	Cybersecurity	Risks	6-8	1	8.2			2-CY-R-1	PLTW - Gateway
Describe social engineering attacks and the potential risks associated with them.	Cybersecurity	Risks	6-8	2	8.2			2-CY-R-2	
Describe risks of using free and open services.	Cybersecurity	Risks	6-8	3	8.2			2-CY-R-3	
Describe which actions to take and not to take when an application or device reports a problem or behaves unexpectedly.	Cybersecurity	Response	6-8	1	8.2			2-CY-RP-1	PLTW - Gateway
Explain physical and digital security measures that protect electronic information.	Cybersecurity	Safeguards	6-8	1	8.2	8.3		2-CY-S-1	PLTW - Gateway
Demonstrate how multiple methods of encryption provide secure transmission of information.	Cybersecurity	Safeguards	6-8	2	8.2			2-CY-S-2	
Collect data using computational tools or online sources and transform the data to make it more useful and reliable.	Data & Analysis	Visualization, Transformation	6-8	1	6.2	6.3		2-DA-CVT-1	Bootstrap - Data Science PLTW - Gateway URI - ICDS
Create and refine computational models based on generated or gathered data.	Data & Analysis	Inferences and Models	6-8	1	4.4	5.3	6.1	2-DA-IM-1	URI - ICDS
Discuss potential visible biases that could exist in a dataset and how these biases could affect analysis conclusions.	Data & Analysis	Inferences and Models	6-8	2	1.3	7.1		2-DA-IM-2	Code.org - Discoveries Bootstrap - Data Science URI - ICDS
Store, retrieve, and share data to collaborate, using a cloud-based system.	Data & Analysis	Storage	6-8	1	2.4	5.3		2-DA-ST-1	URI - ICDS
Describe various low-level data transformations and identify which result in a loss of information.	Data & Analysis	Storage	6-8	2	4.1	4.3		2-DA-ST-2	URI - ICDS
Use software tools to create artifacts that engage users over time.	Digital Literacy	Creation and Use	6-8	1	8.1			2-DL-CU-1	PLTW - Gateway URI - ICDS
Conduct searches over multiple types of digital information.	Digital Literacy	Searching Digital Information	6-8	1	8.1	8.2		2-DL-SDI-1	PLTW - Gateway URI - ICDS
Describe the different types of software components that support common tasks in software tools.	Digital Literacy	Understanding Software Tools	6-8	1	8.1	8.3		2-DL-US-1	PLTW - Gateway URI - ICDS
Compare and contrast tradeoffs associated with computing technologies that affect people's everyday activities and career options.	Responsible Computing & Society	Culture	6-8	1	7.2			2-RC-CU-1	PLTW - Gateway
Discuss issues of bias and accessibility in the design of existing technologies.	Responsible Computing & Society	Culture	6-8	2	1.2			2-RC-CU-2	PLTW - Gateway
Collaborate and strategize with many online contributors when creating a computational or digital artifact.	Responsible Computing & Society	Social Interactions	6-8	1	2.4	5.2		2-RC-SI-1	
Discuss how laws control use and access to intellectual property, and mandate broad access to information technologies.	Responsible Computing & Society	Safety, Law & Ethics	6-8	1	7.3			2-RC-SLE-1	PLTW - Gateway
Create computational artifacts that use algorithms to solve computational problems by leveraging prior knowledge and personal interests.	Computational Thinking & Programming	Algorithms	9-12	1	5.2			3-CT-A-1	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum PLTW - AP CSP PLTW - CSE URI - ICDS
Create and justify the selection of specific control structures when tradeoffs involve code organization, readability, and program performance and explain the benefits and drawbacks of choices made.	Computational Thinking & Programming	Control Structures	9-12	1	5.2			3-CT-C-1	Code.org - AP CSP PLTW - AP CSP PLTW - CSE URI - ICDS
Systematically design and implement computational artifacts for targeted audiences by incorporating feedback from users.	Computational Thinking & Programming	Computational Design	9-12	1	5.1			3-CT-CD-1	Code.org - AP CSP Code.org - AP CSP Bootstrap - Algebra Bootstrap - Data Science PLTW - CSA
Systematically test and refine programs using a range of test cases.	Computational Thinking & Programming	Computational Design	9-12	2	6.1			3-CT-CD-2	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum Bootstrap - Algebra Bootstrap - Data Science PLTW - AP CSP PLTW - CSE PLTW - Cyber Security 3A URI - ICDS
Document computational artifacts in order to make them easier to follow, test, and debug.	Computational Thinking & Programming	Computational Design	9-12	3	7.2			3-CT-CD-3	Code.org - AP CSP Bootstrap - Data Science PLTW - AP CSP PLTW - CSE URI - ICDS
Create a program that processes a collection of data.	Computational Thinking & Programming	Data Structures and Data Types	9-12	1	5.2			3-CT-D-1	Code.org - AP CSP Bootstrap - Algebra PLTW - AP CSP PLTW - CSE URI - ICDS
Identify existing computational artifacts that can be used for the subtasks of a decomposed problem.	Computational Thinking & Programming	Modularity	9-12	1	3.2			3-CT-M-1	URI - ICDS Code.org - AP CSP Bootstrap - Data Science PLTW - AP CSP PLTW - CSE URI - ICDS
Create computational artifacts by incorporating pre-defined procedures, self-defined procedures and external artifacts.	Computational Thinking & Programming	Modularity	9-12	2	5.2	5.3		3-CT-M-2	URI - ICDS Code.org - AP CSP
Explain the role of a variable within a program, and the scope in which its name and value can be used.	Computational Thinking & Programming	Variables	9-12	1	4.1			3-CT-V-1	URI - ICDS

STANDARD	Core Concept	Sub-Concept	Grade Level	Grade Level Series in Sub-Concept	Practice 1	Practice 2	Practice 3	Identifier	Providers
Analyze a computing system and explain how abstractions simplify the underlying implementation details embedded in everyday objects.	Computing Systems & Networks	Human-Computer Interfaces	9-12	1	4.1			3-CSN-H-1	PLTW - AP CSP PLTW - CSE Code.org - AP CSP PLTW - AP CSP
Compare levels of abstraction and interactions between application software, system software, and hardware layers.	Computing Systems & Networks	Hardware and Software	9-12	1	4.1			3-CSN-HS-1	PLTW - CSE PLTW - Cyber Security 3A Code.org - AP CSP
Identify the various elements of a network and describe how they function and interact to transfer information.	Computing Systems & Networks	Networks and the Internet	9-12	1	7.2			3-CSN-N-1	PLTW - CSA PLTW - Cyber Security 3B
Develop and communicate troubleshooting strategies others can use to identify and fix errors.	Computing Systems & Networks	Troubleshooting	9-12	1	6.2			3-CSN-T-1	PLTW - CSE
Explain the privacy concerns related to the collection and generation of data through automated processes that may not be evident to users.	Cybersecurity	Risks	9-12	1	8.3			3-CY-R-1	PLTW - AP CSP Code.org - AP CSP PLTW - AP CSP PLTW - CSE PLTW - Cyber Security 3A Code.org - AP CSP
Analyze an existing or proposed application to identify the potential ways it could be used to obtain sensitive information.	Cybersecurity	Risks	9-12	2	3.1	8.2	8.3	3-CY-R-2	
Explain how the digital security of an organization may be affected by the actions of its employees.	Cybersecurity	Risks	9-12	3	8.1			3-CY-R-3	
Describe the appropriate actions to take in response to detected security breaches.	Cybersecurity	Response	9-12	1	8.3			3-CY-RP-1	
Recommend security measures to address various scenarios based on factors such as efficiency, feasibility, and ethical impacts.	Cybersecurity	Safeguards	9-12	1	8.3			3-CY-S-1	PLTW - AP CSP PLTW - CSE PLTW - Cyber Security 3A Code.org - AP CSP Code.org - Fundamentals Code.org - Discoveries PLTW - AP CSP PLTW - CSE PLTW - Cyber Security 3A Code.org - AP CSP
Explain tradeoffs when selecting and implementing cybersecurity recommendations.	Cybersecurity	Safeguards Collection, Visualization, Transformation	9-12	2	8.3			3-CY-S-2	
Select appropriate data-collection tools and presentation techniques for different types of data.	Data & Analysis		9-12	1	4.1	7.2		3-DA-CVT-1	Bootstrap - Data Science URI - ICDS Code.org - Discoveries PLTW - AP CSP PLTW - Cyber Security 3A URI - ICDS
Create computational models that represent the relationships among different elements of data collected from a phenomenon or process.	Data & Analysis	Inferences and Models	9-12	1	4.4	5.1	5.2	3-DA-IM-1	Code.org - AP CSP Code.org - Discoveries Bootstrap - Data Science URI - ICDS
Discuss potential hidden biases that could be introduced while collecting a dataset and how these biases could affect analysis conclusions.	Data & Analysis	Inferences and Models	9-12	2	1.1	1.3	7.1	3-DA-IM-2	Code.org - AP CSP Code.org - Discoveries Bootstrap - Data Science URI - ICDS
Evaluate the ability of models and simulations to test and support the refinement of hypotheses.	Data & Analysis	Inferences and Models	9-12	3	4.4	6.3		3-DA-IM-3	Bootstrap - Data Science PLTW - CSA URI - ICDS
Explain tradeoffs between storing data locally or in central, cloud-based systems.	Data & Analysis	Storage	9-12	1	2.4	5.1		3-DA-ST-1	
Translate data for various real-world phenomena, such as characters, numbers, and images, into bits.	Data & Analysis	Storage	9-12	2	4.1			3-DA-ST-2	PLTW - AP CSP PLTW - Cyber Security 3A Code.org - AP CSP Code.org - Fundamentals PLTW - CSA URI - ICDS
Select appropriate software tools or resources to create a significant artifact or solve a problem.	Digital Literacy	Creation and Use	9-12	1	8.1	8.3		3-DL-CU-1	
Decompose a complex problem into multiple questions, identify which can be explored through digital sources, and synthesize query results using a variety of software tools.	Digital Literacy	Searching Digital Information	9-12	1	8.1	8.3		3-DL-SDI-1	Code.org - Discoveries URI - ICDS
Describe different kinds of computations that software tools perform to tailor a system to individual users.	Digital Literacy	Understanding Software Tools	9-12	1	8.1	8.3		3-DL-US-1	
Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices.	Responsible Computing & Society	Culture	9-12	1	1.2			3-RC-CU-1	PLTW - AP CSP PLTW - CSE PLTW - Cyber Security 3A Code.org - AP CSP PLTW - AP CSP PLTW - CSE Code.org - AP CSP
Design and analyze computational artifacts to reduce bias and equity deficits.	Responsible Computing & Society	Culture	9-12	2	1.2	6.3		3-RC-CU-2	
Evaluate the impact of equity, access, and influence on the distribution of computing resources in a global society.	Responsible Computing & Society	Culture	9-12	3	1.2			3-RC-CU-3	PLTW - CSE PLTW - CSA PLTW - AP CSP PLTW - CSE PLTW - Cyber Security 3A Code.org - AP CSP
Use tools and methods for collaboration on a project to increase connectivity between people in different cultures and career fields.	Responsible Computing & Society	Social Interactions	9-12	1	2.4			3-RC-SI-1	PLTW - AP CSP Code.org - AP CSP Code.org - AP CSP
Evaluate the impact of intellectual property laws on the use of digital information	Responsible Computing & Society	Safety, Law & Ethics	9-12	1	7.3			3-RC-SLE-1	PLTW - AP CSP Code.org - AP CSP PLTW - AP CSP PLTW - CSE Code.org - AP CSP
Evaluate the social and economic implications of privacy and free speech in the context of safety, law, or ethics.	Responsible Computing & Society	Safety, Law & Ethics	9-12	2	7.3			3-RC-SLE-2	
Keep login and personal information private, and log off of devices appropriately.	Cybersecurity	Risks	K-2	1	8.1			1A-CY-R-1	
Identify situations and devices that should be reported to a responsible adult.	Cybersecurity	Response	K-2	1	8.1			1A-CY-RP-1	Code.org - Fundamentals
Recognize basic digital security features.	Cybersecurity	Safeguards	K-2	1	8.1			1A-CY-S-1	Code.org - Fundamentals Code.org - Discoveries PLTW - Launch URI - ICDS
Collect and present the same data in multiple formats. Identify and describe patterns in data presentations, such as charts or graphs, to make predictions.	Data & Analysis	Collection, Visualization, Transformation	K-2	1	4.4	7.2		1A-DA-CVT-1	URI - ICDS Bootstrap - Data Science URI - ICDS
Identify data as information that is stored by software.	Data & Analysis	Inferences and Models	K-2	1	4.1			1A-DA-IM-1	
	Data & Analysis	Storage	K-2	1	4.2			1A-DA-ST-1	Code.org - Fundamentals Code.org - Fundamentals Bootstrap - Algebra Bootstrap - Data Science PLTW - Launch URI - ICDS
Use software tools to create simple digital artifacts.	Digital Literacy	Creation and Use	K-2	1	8.1			1A-DL-CU-1	Code.org - Fundamentals URI - ICDS
Conduct basic digital searches.	Digital Literacy	Searching Digital Information	K-2	1	8.1			1A-DL-SDI-1	Code.org - Fundamentals URI - ICDS
Describe basic differences between humans and computers for performing computational tasks.	Digital Literacy	Understanding Software Tools	K-2	1	8.1	8.3		1A-DL-US-1	PLTW - Launch
Compare and contrast how individuals live and work before and after the implementation or adoption of new computing technology.	Responsible Computing & Society	Culture	K-2	1	3.1			1A-RC-CU-1	Code.org - Discoveries PLTW - Launch
Work respectfully and responsibly with others online.	Responsible Computing & Society	Social Interactions	K-2	1	2.1			1A-RC-SI-1	
Discuss ownership and attribution of digital artifacts.	Responsible Computing & Society	Safety, Law & Ethics	K-2	1	7.3			1A-RC-SLE-1	Creative Computing With Scratch - CCS 3-8: BootUp Curriculum