Computer Science and Digital Fluency Learning Standards

Standards at a Glance — Grades K-1

Impacts of Computing

Subconcept	Standard
Society	**K-1.IC.1** Identify and discuss how tasks are accomplished with and without computing technology.
Society	**K-1.IC.2** Identify and explain classroom and home rules related to computing technologies.
Ethics	**K-1.IC.3** Identify computing technologies in the classroom, home, and community.
Ethics	**K-1.IC.4** Identify public and private spaces in our daily lives.
Ethics	**K-1.IC.5** *This Standard begins in Grade Band 2–3.*
Accessibility	**K-1.IC.6** With teacher support, identify different ways people interact with computers and computing devices.
Career Paths	**K-1.IC.7** Identify multiple jobs that use computing technologies.

Computational Thinking

Subconcept	Standard
Modeling and Simulation	**K-1.CT.1** Identify and describe one or more patterns (found in nature or designed), and examine the patterns to find similarities and make predictions.
Data Analysis and Visualization	**K-1.CT.2** Identify different kinds of data that can be collected from everyday life.
Data Analysis and Visualization	**K-1.CT.3** Identify ways to visualize data, and collaboratively create a visualization of data.
Abstraction and Decomposition	**K-1.CT.4** Identify a problem or task and discuss ways to break it into multiple smaller steps.
Abstraction and Decomposition	**K-1.CT.5** Recognize that the same task can be described at different levels of detail.
Algorithms and Programming	**K-1.CT.6** Follow an algorithm to complete a task.
Algorithms and Programming	**K-1.CT.7** Identify terms that refer to different concrete values over time.
Algorithms and Programming	**K-1.CT.8** Identify a task consisting of steps that are repeated, and recognize which steps are repeated.
Algorithms and Programming	**K-1.CT.9** Identify and fix (debug) errors within a simple algorithm.
Algorithms and Programming	**K-1.CT.10** Collaboratively create a plan that outlines the steps needed to complete a task.

Networks & System Design

Subconcept	Standard
Hardware and Software	**K-1.NSD.1** Identify ways people provide input and get output from computing devices.
	K-1.NSD.2 Identify basic hardware components that are found in computing devices.
	K-1.NSD.3 Identify basic hardware and/or software problems.
Networks and the Internet	**K-1.NSD.4** Identify how protocols/rules help people share information over long distances.
	K-1.NSD.5 Identify physical devices that can store information.

Cybersecurity

Subconcept	Standard
Risks	**K-1.CY.1** Identify reasons for keeping information private.
Safeguards	**K-1.CY.2** Identify simple ways to help keep accounts secure.
	K-1.CY.3 *This Standard begins in Grade Band 2–3.*
	K-1.CY.4 Decode a word or short message using a simple code.
Response	**K-1.CY.5** Identify when it is appropriate to open and/or click on links or files.

Digital Literacy

Subconcept	Standard
Digital Use	**K-1.DL.1** Identify and explore the keys on a keyboard.
	K-1.DL.2 Communicate and work with others using digital tools.
	K-1.DL.3 Conduct a basic search based on a provided keyword.
	K-1.DL.4 Use a least one digital tool to create a digital artifact.
	K-1.DL.5 *This Standard begins in Grade Band 4–6.*
Digital Citizenship	**K-1.DL.6** *This Standard begins in Grade Band 2–3.*
	K-1.DL.7 Identify actions that promote good digital citizenship and those that do not.