

# Grade 2

## Computing Systems CS

### D. Devices D

- 1 Select and use a computing device to perform a variety of tasks for an intended outcome. 2.CS.D.01
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### HS. Hardware and Software HS

- 1 Model the use of components of a computing system, its basic functions, peripherals, and storage features.(e.g. using the hard drive, memory/storage, printers, scanners, wireless and cabled connections, and cloud storage). 2.CS.HS.01
  - 2 Self-select and use appropriate software/apps for an intended outcome. (e.g., programs, browsers, websites, and applications). 2.CS.HS.02
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### IO. Input and Output IO

- 1 Understand and use varying input/output skills. 2.CS.IO.01
    - a Input (keyboarding, mouse, touchscreen, voice, voice typing, camera, robotics, interactive board) 2.CS.IO.01.A
    - b Output (monitor, screen, printer, 3D printer, robotics, audio) 2.CS.IO.01.B
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### T. Troubleshooting T

- 1 Using accurate terminology, identify and resolve simple hardware and software problems and strategies for solving these problems. 2.CS.T.01
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## Networks & the Internet NI

### NCO. Network Communication & Organization NCO

- 1 Use computing devices to share information and communicate with others using a network. 2.NI.NCO.01
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### C. Cybersecurity C

- 1 Demonstrate use of strong authentication methods to access and protect devices and data. Understand the effects of retaining password privacy. 2.NI.C.01
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## Data Analysis DA

### S. Storage S

- 1 Manipulate existing files while use appropriate file-naming conventions. With guidance, develop and modify an organizational structure by creating, copying, moving, and deleting files and folders. 2.DA.S.01

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**C. Collection** C

- 1 With guidance, collect and present the same data in various visual formats. 2.DA.C.01

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**CVT. Visualization & Transformation** CVT

- 1 Collect data over time and organize it on a chart or graph in order to make a prediction. 2.DA.CVT.01

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**IM. Inference and Models** IM

- 1 Use patterns in data to make inferences or predictions based on data collected from users or simulations. 2.DA.IM.01

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**Algorithms and Programming** AP**A. Algorithms** A

- 1 Both independently and collaboratively construct and follow algorithms that include sequencing and simple loops to accomplish a task verbally, kinesthetically, with robot devices, or a programming language. 2.AP.A.01

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**V. Variables** V

- 1 Use and model the way a computer program stores, accesses, and manipulates data that is represented as a variable. 2.AP.V.01

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**C. Control** C

- 1 Independently and collaboratively create programs to accomplish tasks using a programming language such as block based programming using a robot device, or unplugged activity that includes simple loops, sequencing, and repetition. 2.AP.C.01

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**M. Modularity** M

- 1 Independently decompose (break down) a larger problem into smaller subproblems and steps needed to solve those problems. 2.AP.M.01

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**PD. Program Development** PD

- 1 Independently create a grade-level appropriate artifact to illustrate thoughts, ideas, or stories in a sequential (step-by-step) manner (e.g., story map, storyboard, and sequential graphic organizer). 2.AP.PD.01
  - 2 Give credit to ideas, creation (such as code, music, or pictures) and solutions of others while writing and developing programs. 2.AP.PD.02
  - 3 Independently and collaboratively construct, execute, analyze and debug (fix) an algorithm using a programming language and/or unplugged activity that includes sequencing and simple loops. 2.AP.PD.03
  - 4 Use correct terminology (debug, program input/output, code) to explain the development of an algorithm to solve a problem in an unplugged activity, hands on manipulatives, or a programming language. 2.AP.PD.04
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## Impacts of Computing IC

### C. Culture C

- 1 Recognize and describe how different technologies used daily in work and at home are used to solve problems or make work and life easier. 2.IC.C.01
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### SI. Social Interactions SI

- 1 Aid in developing an appropriate code of conduct, explain and practice grade-level appropriate behavior and responsibilities while participating in an online community. Identify and report inappropriate behavior (Digital Citizenship - review Digital Literacy and Digital Etiquette, but focus on Rights and Responsibilities and Digital Health and Wellness). 2.IC.SI.01
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### H. History H

- 1 Recognize how technologies have changed the world, and explore how the needs of society have impacted the changes in technology. 2.IC.H.01
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### SLE. Safety, Law, & Ethics SLE

- 1 Practice responsible digital citizenship in all technology use. Understand digital data has intellectual property rights (belongs to others) and it cannot be claimed as your own. 2.IC.SLE.01
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### CP. Community Partnerships CP

- 1 Investigate how computer science has impacted your daily life and the jobs in your community and the world around you. 2.IC.CP.01