

Grade PK

Computing Systems

D. Devices D

- 1 With guidance, demonstrate how to operate a computing device. PK.CS.D.01
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HS. Hardware and Software HS

- 1 With guidance, use appropriate terminology to locate and identify common computing devices and components in a variety of environments (e.g. turn on, navigate, open/close programs/apps). PK.CS.HS.01
 - 2 With guidance, correctly use software that controls computing devices (e.g. e.g. programs, browsers, websites, and applications). PK.CS.HS.02
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IO. Input and Output IO

- 1 With guidance, identify and apply basic input/output skills. PK.CS.IO.01
 - a Input (keyboarding, mouse, touchscreen, voice, camera, interactive board) PK.CS.IO.01.A
 - b Output (monitor, screen, printer, audio). PK.CS.IO.01.B
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T. Troubleshooting T

- 1 Recognize that computing systems might not work as expected and with guidance can identify simple hardware or software problems (e.g. volume turned down on headphones, monitor turned off). PK.CS.T.01
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Networks & the Internet

NCO. Network Communication & Organization NCO

- 1 Recognize that computing devices are connected via wired or wireless networks so that they can communicate with each other. PK.NI.NCO.01
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C. Cybersecurity C

- 1 Recognize that passwords are private and should be kept secret. PK.NI.C.01
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Data Analysis

S. Storage S

- 1 Know that the computing device can save information as data that can be searched, modified, and saved or deleted (e.g. save photos, files, or videos). PK.DA.S.01

C. Collection C

- 1 Students understand that data about themselves and the world around them is collected, used, and organized in a meaningful way. PK.DA.C.01
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CVT. Visualization & Transformation CVT

- 1 Students represent collected data in a visual way. (e.g. charts, graphs, tables). PK.DA.CVT.01
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IM. Inference and Models IM

- 1 Students look for patterns in data, make predictions, and make a model (e.g. make predictions on weather data, butterfly life cycle, etc.) and present in a picture graph or pattern. PK.DA.IM.01
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Algorithms and Programming**A. Algorithms** A

- 1 With guidance, construct and execute algorithms (set of step-by-step instructions) that includes sequencing and simple loops to accomplish a task, with or without a computing device (e.g. verbally, kinesthetically, with robot devices or a programming language, block coding). PK.AP.A.01
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V. Variables V

- 1 With guidance, understand that numbers represent different types of data using numbers or other symbols (e.g. thumbs up/thumbs down for yes/no color by number, arrows for direction, encoding/decoding a word using numbers or pictographs). PK.AP.V.01
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C. Control C

- 1 With guidance, create programs to accomplish tasks using a programming language, robot device, or unplugged activity that includes sequencing events and simple loops (e.g. emphasizing beginning, middle, and end; collaborative programming). PK.AP.C.01
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M. Modularity M

- 1 With guidance, decompose (break down) a larger problem into smaller subproblems. PK.AP.M.01

PD. Program Development PD

- 1 Create a design document to illustrate thoughts, ideas, and stories in a sequential manner. PK.AP.PD.01
 - 2 Recognize that digital items can be owned and that proper credit needs to be given (e.g. using code, music, pictures). PK.AP.PD.02
 - 3 With guidance, construct, execute, and debug (identify and fix) algorithms using a programming language and or an unplugged activity that includes sequencing (e.g. use block based programming). PK.AP.PD.03
 - 4 With guidance, use correct terminology in the development of an algorithm to solve a simple problem (e.g. beginning, middle, end). PK.AP.PD.04
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Impacts of Computing**C. Culture** C

- 1 Understand different ways in which types of technologies are used in your daily life. PK.IC.C.01
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SI. Social Interactions SI

- 1 With guidance understand what would be appropriate while participating in an online environment. (Digital Citizenship - focus on Digital Literacy). PK.IC.SI.01
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H. History H

- 1 Understand that computing technology has changed and improved the way people live, work, and interact. PK.IC.H.01
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SLW. Safety, Law, & Ethics SLW

- 1 With guidance understand responsible digital citizenship (legal and ethical behaviors) in the use of technology systems and software. PK.IC.SLE.01
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CP. Community Partnerships CP

- 1 Discuss the fact that a wide range of jobs require knowledge or use of computer science. PK.IC.CP.01