Kansas Computer Science

Grade 1

Computing Systems CS

D. Devices D

1 With guidance, select and use a computing device to perform a variety of tasks for an intended outcome. 1.CS.D.01

HS. Hardware and Software HS

1 Use appropriate terminology in identifying and describing the function of common computing devices and components (e.g., use an app to draw on the screen, use software to write a story or control robots). 1.CS.HS.01

2 With guidance select and use appropriate software/apps for an intended outcome (e.g., programs, browsers, websites, and applications). 1.CS.HS.02

IO. Input and Output IO

1 Understand and apply basic input/output skills. 1.CS.IO.01

a Input (keyboarding, mouse, touchscreen, voice, camera, robotics, interactive board) 1.CS.IO.01.A

b Output (monitor, screen, printer, 3D printer, robotics, audio) 1.CS.IO.01.B

T. Troubleshooting T

1 Identify and describe basic hardware and software problems using accurate terminology (app or program is not working as expected, no sound is coming from the device, caps lock turned on, wi-fi not working). 1.CS.T.01

Networks & the Internet NI

NCO. Network Communication & Organization NCO

1 Recognize that by connecting computing devices together they can share information using a network (e.g. wired or wireless network). 1.NI.NCO.01

C. Cybersecurity C

1 Identify what authentication methods (passwords) are; explain why they are not shared; and discuss what makes a password strong. Independently, use passwords to access technological devices, apps, etc. 1.NI.C.01

Data Analysis DA

S. Storage S

1 With guidance locate, open, modify, delete and save an existing file, use appropriate file-naming conventions, and recognize that the file exists within an organizational structure (drive, folder, file). 1.DA.S.01

C. Collection C

1 With guidance, collect data and present it two different ways (chart or graph). 1.DA.C.01

CVT. Visualization & Transformation CVT

1 With guidance, identify and interpret data from a chart or graph (visualization) in order to make a prediction, with or without a computing device. 1.DA.CVT.01

IM. Inference and Models IM

1 Create a model of an object or process in order to identify patterns and essential elements. (e.g. water table, butterfly life cycle, seasonal weather patterns). 1.DA.IM.01

Algorithms and Programming AP

A. Algorithms A

1 With guidance, model daily processes and follow algorithms (sets of step-by-step instructions) for complete tasks verbally, kinesthetically, with robot devices, or a programing language. 1.AP.A.01

V. Variables V

1 With guidance, model the way that programs store and manipulate data by using numbers or other symbols to represent information (e.g. thumbs up/thumbs down for yes/no, use arrows when writing algorithms to represent direction, or encode and decode words using numbers, pictographs, or other symbols to represent letters or words). 1.AP.V.01

C. Control C

1 With guidance, independently, or collaboratively construct algorithms (sets of step-by-step instructions) to accomplish tasks using a programming language, robot device, or unplugged activity that includes sequencing and repetition, to express ideas or address a problem. 1.AP.C.01

M. Modularity M

1 With guidance, decompose (break down) the steps needed to solve a problem into a precise sequence of instructions. 1.AP.M.01

PD. Program Development PD

1 Independently or with guidance, 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). 1.AP.PD.01

2 Independently or with guidance give credit to ideas, creations and solutions of others while writing and/or developing programs. 1.AP.PD.02

3 With guidance, independently, or collaboratively construct, execute, and debug (identify and fix) programs using a programming language and/or unplugged activity that includes sequencing and repetition. 1.AP.PD.03

4 Use correct terminology (first, second, third) and explain the choices made in the development or an algorithm to solve a simple problem. 1.AP.PD.04

Impacts of Computing IC

C. Culture C

1 Identify how people use different types of technologies in their daily work and personal lives. 1.IC.C.01

SI. Social Interactions SI

1 With guidance, identify appropriate and inappropriate behavior. Act responsibly while participating in an online community and know how to report concerns. (Digital Citizenship - review Digital Literacy, but focus on Digital Etiquette and Rights and Responsibilities) 1.IC.SI.01

H. History H

1 Compare how people live and work before and after the implementation or adoption of new computing technology. 1.IC.H.01

SLE. Safety, Law, & Ethics SLE

1 Practice responsible digital citizenship (legal and ethical behaviors) in the use of technology systems and software. Keep login information private, and log off of devices appropriately. 1.IC.SLE.01

CP. Community Partnerships CP

1 Compare and contrast examples of how computing technology has changed and improved the way people live, work, and interact. 1.IC.CP.01