Kansas Computer Science

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

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

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

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

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

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

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

C. Collection C

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

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

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

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 programing language. 2.AP.A.01

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

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

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

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

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

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

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

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

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