Kansas Computer Science

Grade 3

Computing Systems CS

D. Devices D

1 Identify how computing devices can be connected to other devices to extend their capabilities. 3.CS.D.01

HS. Hardware and Software HS

1 Model how information flows through hardware and software to accomplish tasks. 3.CS.HS.01

IO. Input and Output IO

1 Demonstrate proper use of grade level appropriate input devices and produce digital artifacts with a controlled audience. 3.CS.IO.01

T. Troubleshooting T

1 Identify, using accurate terminology, simple hardware and software problems and strategies for solving these problems. 3.CS.T.01

Networks & the Internet NI

NCO. Network Communication & Organization NCO

1 Model how a device on a network sends and receives information. 3.NI.NCO.01

C. Cybersecurity C

1 Identify problems that relate to inappropriate use of computing devices and networks. 3.NI.C.01

Data Analysis DA

S. Storage S

1 Compare and contrast the formats and storage requirements for different types of information (e.g., music, video, images, and text). 3.DA.S.01

C. Collection C

1 Gather relevant and reliable data to solve a problem or answer a question. 3.DA.C.01

CVT. Visualization & Transformation CVT

1 Create a simple data visualization based on data collected by or provided to student. 3.DA.CVT.01

IM. Inference and Models IM

1 Utilize data to make predictions and discuss whether there is adequate data to make reliable predictions. 3.DA.IM.01

Algorithms and Programming AP

A. Algorithms A

1 Compare multiple algorithms for the same task. 3.AP.A.01

V. Variables V

1 Utilize simple programs that use variables to store and modify grade level appropriate data. 3.AP.V.01

C. Control C

1 Create simple programs using a programming language that utilize sequencing, repetition, conditionals, and variables to solve a problem or express ideas independently. 3.AP.C.01

M. Modularity M

1 Decompose (break down) the steps needed to solve a problem into a precise sequence of instructions. 3.AP.M.01

2 With grade appropriate complexity, modify, remix, or incorporate portions of an existing program into one's own work, to develop something new or add more advanced features. 3.AP.M.02

PD. Program Development PD

1 Create a plan using an iterative process to plan the development of a program while solving simple problems (e.g., storyboard, flowchart, pseudo-code, story map). 3.AP.PD.01

2 Use proper citations and document when ideas are borrowed and changed for their own use (e.g., using pictures created by others, using music created by others, remixing programming projects). 3.AP.PD.02

3 Analyze and debug (identify/fix errors) a program that includes sequencing, repetition and variables in a programming language. 3.AP.PD.03

4 Communicate and explain your program development using comments, presentations and demonstrations. 3.AP.PD.04

Impacts of Computing IC

C. Culture C

1 Identify possible problems and how computing devices have built in features for increasing accessibility to all users. 3.IC.C.01

SI. Social Interactions SI

1. Develop a 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 of all nine components, but focused on Digital Communication and Digital Etiquette.) 3.IC.SI.01
2. Identify how computational products may be, or have been, improved to incorporate diverse perspectives. 3.IC.SI.02

H. History H

1. Identify computing technologies that have changed the world, and express how those technologies influence, and are influenced by, society. 3.IC.H.01

SLE. Safety, Law, & Ethics SLE

1. Identify types of digital data that may have intellectual property rights that prevent copying or require attribution. 3.IC.SLE.01

CP. Community Partnerships CP

1. Design a visual product depicting the connections between computer science and other fields. 3.IC.CP.01