Ohio’s Learning Standards

Computer Science Grade 2

ADOPTED DECEMBER 2018

Ohio | Department of Education

Grade 2

COMPUTING SYSTEMS

Devices

CS.D.2.a Select and operate commonly used devices to perform a variety of tasks.

Hardware and Software

CS.HS.2.a Select and use hardware and software necessary for accomplishing a task.

Troubleshooting

CS.T.2.a Use problem solving strategies to troubleshoot a problem.

NETWORKS AND THE INTERNET

Networking

NI.N.2.a Describe how information can be communicated electronically to gain a deeper understanding of how information is transmitted (e.g., email, social media).

NI.N.2.b Use computing devices that are connected to share and receive information from the global community.

Cybersecurity

NI.C.2.a Explain and demonstrate secure practices (e.g., creating strong passwords) to protect private information.

DATA AND ANALYSIS

Data Collection and Storage

DA.DCS.2.a Collect and organize data to store, retrieve and modify.

DA.DCS.2.b Manipulate data to perform various tasks.

Visualization and Communication

DA.VC.2.a Organize, analyze and present data in various formats.

Inference and Modeling

DA.IM.2.a Interpret and analyze data, graphs, models or charts.

ALGORITHMIC THINKING AND PROGRAMMING

Algorithms

ATP.A.2.a Model a real-world process by constructing and following step-by-step instructions (i.e., algorithms) to complete tasks.

Variables and Data Representation

ATP.VDR.2.a Construct a model that shows the way programs store and manipulate data by using numbers or other symbols to represent information.

Control Structures

ATP.CS.2.a Develop a program that uses sequencing and repetition (i.e., loops) to solve a problem or express ideas.

Modularity

ATP.M.2.a Break down (i.e., decompose) a series of steps and separate the necessary from the unnecessary steps to create a precise sequence of instructions to solve a problem or express an idea.

Program Development

ATP.PD.2.a Plan and create an artifact to illustrate thoughts, ideas and problems in a sequential (step-by-step) manner (e.g., story map, storyboard, sequential graphic organizer).

ATP.PD.2.b Identify and fix (i.e., debug) a multi-step process that includes sequencing.

IMPACTS OF COMPUTING

Culture

IC.Cu.2.a Compare and contrast how the use of technology has changed to understand its impact on everyday life.

IC.Cu.2.b Describe the ways people use technologies in their daily work and personal lives to understand technology's impact on one's community.

Social Interactions

IC.SI.2.a Compare and contrast safe and responsible behaviors to those that are not when using information and technology.

Safety, Law and Ethics

IC.SLE.2.a Discuss appropriate and ethical uses of technology to guide informed decision.