West Virginia Technology and Computer Science

Computer Science: 6-8

Computer Systems and Computational Thinking	1	Analyze and devise problem-solving strategies cooperatively and collaboratively. CS.6-8.1
	2	Systematically identify and fix problems with computing, devices and their components. CS.6-8.2
	3	Analyze connections between elements of computer science and mathematics. CS.6-8.3
Networks and Cyber Infrastructure	4	Use various computer applications and online resources to explore how networks and cyber infrastructure work together to provide security and prevent system compromise. CS.6-8.4
	5	Model appropriate data privacy and cyber security procedures when using a computer. CS.6-8.5
	6	Understand how information is transmitted via wired and wireless networks and the security vulnerability of each. CS.6-8.6
Data and Information	7	Convert various types of data into different formats. CS.6-8.7
	8	Use digital tools to collect, organize, and analyze data. CS.6-8.8
	9	Produce accurate and correct information from data. CS.6-8.9
Programming and Algorithms	10	Analyze the problem and use a tool (e.g., flow chart) to design an algorithm to solve complex problems. CS.6-8.10
	11	Understand the function of control structures to create specific behaviors (e.g., sequential, selection, repetition). CS.6-8.11
	12	rite computer program(s) to solve simple problems and document the process for others to reference. CS.6-8.12
	13	Seek and incorporate feedback from team members and users to refine a solution that meets user needs. CS.6-8.13
Impacts of Computing	14	Determine the uses of computing concepts and technology in global collaboration. CS.6-8.14

15 **Explain how computer science fosters innovation in all careers and disciplines.** CS.6-8.15

16 **Discuss issues of bias and accessibility in the design of existing technologies.** CS.6-8.16