

Global Goals Game: Computer Science Standards (CSTA) Level 1B: Grades 3-5		
Standard and Descriptive Statement		
1B-CS-01	Describe how internal and external parts of computing devices function to form a system. <i>(Devices)</i>	X
1B-CS-02	Model how computer hardware and software work together as a system to accomplish tasks. <i>(Hardware &amp; Software)</i>	
1B-CS-03	Determine potential solutions to solve simple hardware and software problems using common troubleshooting strategies. <i>(Troubleshooting)</i>	
Networks and the Internet		
1B-NI-04	Model how information is broken down into smaller pieces, transmitted as packets through multiple devices over networks and the Internet, and reassembled at the destination. <i>(Network Communication &amp; Organization)</i>	
1B-NI-05	Discuss real-world cybersecurity problems and how personal information can be protected. <i>(Cybersecurity)</i>	
Data and Analysis		
1B-DA-06	Organize and present collected data visually to highlight relationships and support a claim. <i>(Collection Visualization &amp; Transformation)</i>	X
1B-DA-07	Use data to highlight or propose cause-and-effect relationships, predict outcomes, or communicate an idea. <i>(Inferences &amp; Models)</i>	X
Algorithms and Programming		
1B-AP-08	Compare and refine multiple algorithms for the same task and determine which is the most appropriate. <i>(Algorithms)</i>	X
1B-AP-09	Create programs that use variables to store and modify data. <i>(Variables)</i>	X
1B-AP-10	Create programs that include sequences, events, loops, and conditionals. <i>(Control)</i>	X
1B-AP-11	Decompose (break down) problems into smaller, manageable subproblems to facilitate the program development process. <i>(Modularity)</i>	X
1B-AP-12	Modify, remix, or incorporate portions of an existing program into one's own work, to develop something new or add more advanced features. <i>(Modularity)</i>	X
1B-AP-13	Use an iterative process to plan the development of a program by including others' perspectives and considering user preferences. <i>(Program Development)</i>	X
1B-AP-14	Observe intellectual property rights and give appropriate attribution when creating or remixing programs. <i>(Program Development)</i>	X
1B-AP-15	Test and debug (identify and fix errors) a program or algorithm to ensure it runs as intended. <i>(Program Development)</i>	X
1B-AP-16	Take on varying roles, with teacher guidance, when collaborating with peers during the design, implementation, and review stages of program development. <i>(Program Development)</i>	X
1B-AP-17	Describe choices made during program development using code comments, presentations, and demonstrations. <i>(Program Development)</i>	X
Impacts of Computing		
1B-IC-18	Discuss computing technologies that have changed the world, and express how those technologies influence, and are influenced by, cultural practices. <i>(Culture)</i>	
1B-IC-19	Brainstorm ways to improve the accessibility and usability of technology products for the diverse needs and wants of users. <i>(Culture)</i>	X
1B-IC-20	Seek diverse perspectives for the purpose of improving computational artifacts. <i>(Social Interactions)</i>	X
1B-IC-21	Use public domain or creative commons media, and refrain from copying or using material created by others without permission. <i>(Safety Law &amp; Ethics)</i>	