

Global Goals Game: New York Computer Science and Digital Fluency Learning Standards 4-6		
Impacts of Computing		
Society		
4-6.IC.1	Describe computing technologies that have changed the world, and express how those technologies influence, and are influenced by, cultural practices.	
4-6.IC.2	Explain how laws impact the use of computing technologies and digital information.	
Ethics		
4-6.IC.3	Explain current events that involve computing technologies.	
4-6.IC.4	Explain current events that involve computing technologies.	
4-6.IC.5	Explain how computer systems play a role in human decision-making.	
Accessibility		
4-6.IC.6	Identify and explain ways to improve the accessibility and usability of a computing device or software application for the diverse needs and wants of users.	
Career Paths		
4-6.IC.7	Identify a diverse range of role models in computer science.	
Computational Thinking		
Modeling and Simulation:		
4-6.CT.1	Develop a computational model of a system that shows changes in output when there are changes in inputs.	X
Data Analysis and Visualization:		
4-6.CT.2	Collect digital data related to a real-life question or need.	X
4-6.CT.3	Visualize a simple data set in order to highlight relationships and persuade an audience	X
Abstraction and Decomposition		
4-6.CT.4	Decompose a problem into smaller named tasks, some of which can themselves be decomposed into smaller steps.	X
4-6.CT.5	Identify and name a task within a problem that gets performed multiple times while solving that problem, but with slightly different concrete details each time.	X
Algorithms and Programming		
4-6.CT.6	Compare two or more algorithms and discuss the advantages and disadvantages of each for a specific task.	X
4-6.CT.7	Identify pieces of information that might change as a program or process runs.	X
4-6.CT.8	Develop algorithms or programs that use repetition and conditionals for creative expression or to solve a problem.	X
4-6.CT.9	Explain each step of an algorithm or program that includes repetition and conditionals for the purposes of debugging.	X
4-6.CT.10	Describe the steps taken and choices made to design and develop a solution using an iterative design process.	X
Networks and System Design		
Hardware and Software		
4-6.NSD.1	Propose improvements to the design of a computing technology based on an analysis of user interactions with that technology.	
4-6.NSD.2	Model how computer hardware and software work together as a system to accomplish tasks.	
4-6.NSD.3	Determine potential solutions to solve hardware and software problems using common troubleshooting strategies.	
Networks and the Internet		
4-6.CT.4	Model how data is structured to transmit through a network.	
4-6.CT.5	Describe that data can be stored locally or remotely in a network.	
Cybersecurity		
Risks		
4-6.CY.1	Explain why different types of information might need to be protected.	
Safeguards		
4-6.CY.2	Describe common safeguards for protecting personal information.	
4-6.CY.3	Describe trade-offs between allowing information to be public and keeping information private and secure.	
4-6.CY.4	Model and explain the purpose of simple cryptographic methods.	
Response		
4-6.CY.5	Explain suspicious activity of applications and devices.	
Digital Literacy		
Digital Use		
4-6.DL.1	Type on a keyboard while demonstrating proper keyboarding technique.	X
4-6.DL.2	Select appropriate digital tools to communicate and collaborate while learning with others.	X
4-6.DL.3	Conduct and refine advanced multi-criteria digital searches to locate content relevant to varied learning goals.	X
4-6.DL.4	Use a variety of digital tools and resources to create and revise digital artifacts.	X
4-6.DL.5	Identify common features of digital technologies.	X
Digital Citizenship		
4-6.DL.6	Describe persistence of digital information and explain how actions in online spaces can have consequences.	
4-6.DL.7	Identify and describe actions in online spaces that could potentially be unsafe or harmful.	