Hamilton Heights School Corporation
Computer Science 7/8 Curriculum Map

Course Title: Computer Science 7/8-B	Quarters 1 & 2 or 3/4	Academic Year: 2025

Essential Questions						
Unit Name	Total Days	Standards Number	Knowledge Objectives	Skills Objectives	Specific Assessments	Specific Resources
Interactive Animations and Games	15	6.8.DI	• Problem Solving Process • Working Cooperatively with others • Plotting Shapes • Drawing Shapes and Parameters • Variables • Random Numbers • Sprite Properties • Text • The Draw Loop • Conditionals • Keyboard, Mouse Input	1. Identify how computer science is used in a field of entertainment 2. Communicate how to draw an image in Game Lab, accounting for shape position, color, and order 3. Identify a variable as a way to label and reference a value in a program 4. Use variables in a program to store a piece of information that is used multiple	1. Building A Structure Activity and Participation 2. Problem Solving Process Reflection and Definitions 3. Specific Levels in Code.org to assess understanding 4. Sprite based drawings, animations, and games 5. Post Test Multiple Choice and Open Ended Questions	• Code.org Computer Science Discoveries Curriculum • Game Lab

				times		
Creating Apps with Devices			• Problem Solving Process • Micro:bit devices • Control the micro:bit's LED • Troubleshoot computing devices • Flowcharts, Pseudocode • Communication • Sequencing, looping, conditionals, variables, functions and parameters	1. Develop programs that combine control structures. 2. Decompose problems and subproblems into parts to facilitate the design. 3. Design projects that combine hardware and software components 4. Document programs in order to make them easier to follow, test, and debug. 5. Recommend improvements to the design of devices, based on how users interact with the devices. 6. Create clearly named variables that	1. Specific Levels in Code.org App Lab to assess understanding 2. Field Collector App 3. Board Sensor 4. Mini-Project Interactive Pet	Code.org Computer Science Discoveries Curriculum Makecode.microbit.org Makecode.adafruit.org

				represent different data types. 7. Create procedures with parameters to organize code and make it easier to reuse. 8. Use flowcharts and pseudocode to address complex problems		