

Computer Science/Programming: Grades K-12

COMPUTATIONAL THINKING 1

- 1 Create algorithms, or series of ordered steps, to solve problems. 1.1
- 2 Decompose a problem into smaller more manageable parts. 1.2
- 3 Collect, analyze, and represent data effectively. 1.3
- 4 Demonstrate and understanding of how information is represented, stored, and processed by a computer. 1.4
- 5 Optimize an algorithm for execution by a computer. 1.5
- 6 Create simulations/models to understand natural phenomena and test hypotheses. 1.6
- 7 Evaluate algorithms by their efficiency, correctness, and clarity. 1.7

PROGRAMMING 2

- 1 Write programs using visual (block-based) programming languages (scratch, code.org). 2.1
- 2 Create and modify animations, and present work to others. 2.2
- 3 Write programs using text-based programming languages. 2.3
- 4 Create web pages with a practical, personal, and/or societal purpose. 2.4