

# Computer Science: Grade 4

## Algorithms and Programming

- 1 Test, compare, and refine multiple algorithms for the same task and determine which is the most appropriate. [4.AP.A.1](#)
- 2 Develop programs that include sequences, events, loops, and conditionals. [4.AP.C.1](#)
- 3 Explore how complex tasks can be decomposed into simple tasks and how simple tasks can be composed into complex tasks. [4.AP.M.1](#)
- 4 Test and debug (identify and fix) errors in a program or algorithm to ensure it runs as intended. [4.AP.PD.1](#)

## Computing Systems

- 1 Model how computer hardware and software work together as a system to accomplish tasks. [4.CS.HS.1](#)

## Data and Analysis

- 1 Use data to highlight or propose cause-and-effect relationships, predict outcomes, or communicate ideas. [4.DA.IM.1](#)

## Impacts of Computing

- 1 Compare and contrast how computing has changed society from the past to the present. [4.IC.C.1](#)

## Networks and the Internet

- 1 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. [4.NI.NCO.1](#)