

# Computer Science: Grade 3

## Algorithms and Programming

- 1 Debug (identify and fix) errors in an algorithm or program that includes sequences and loops. 3.AP.PD.1**
- 2 Take on varying roles (e.g., researcher, programmer, test developer, designer, recorder) with teacher guidance, when collaborating with peers during the design, implementation, and review stages of program development. 3.AP.PD.2**
- 3 Create programs that use variables to store and modify data. 3.AP.V.1**

## Computing Systems

- 1 Describe how internal and external parts of computing devices function to form a system. 3.CS.D.1**

## Data and Analysis

- 1 Organize and present collected data visually to highlight relationships and support a claim. 3.DA.CVT.1**

## Impacts of Computing

- 1 Discuss computing technologies that have changed the world, and express how those technologies influence and are influenced by cultural practices. 3.IC.C.1**
- 2 Use public domain or creative commons media, and refrain from copying or using material created by others without permission. 3.IC.SLE.1**

## Networks and the Internet

- 1 Discuss real-world cybersecurity problems and how personal information can be protected. 3.NI.C.1**