Tennessee Computer Science

# Grade 4

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| **Foundational Concepts** 4.FC | **1** Demonstrate an appropriate level of proficiency in performing tasks using a range of digital devices. 4.FC.1 |
| | **2** Use age-appropriate online tools and resources (e.g., learning management systems, grade and assignment record, tutorial, assessment, web browser). 4.FC.2 |
| | **3** Create a simple digital model of a system and explain what the model shows and does not show. 4.FC.3 |
| **Algorithmic Thinking** 4.AT | **1** Examine logical reasoning to predict outcomes of an algorithm. 4.AT.1 |
| | **2** Use flowcharts to create a plan or algorithm. 4.AT.2 |
| | **3** Construct a basic system of numbers, letters, or symbols to represent information as a cipher. 4.AT.3 |
| **Data Analysis** 4.DA | **1** Collect, organize, analyze, and interpret data to identify solutions and/or make informed decisions. 4.DA.1 |
| | **2** Gather data to answer a question using a variety of computing and data visualization methods. 4.DA.2 |
| **Networking and the Internet** 4.NI | **1** Identify appropriate and inappropriate uses of communication technology and discuss the permanence of actions in the digital world. 4.NI.1 |
| | **2** Conduct advanced keyword searches to produce valid, appropriate results and evaluate results for accuracy, relevance, and appropriateness. 4.NI.2 |
| **Programming Concepts** 4.PC | **1** Test and debug a given program in a block-based visual programming environment using arithmetic operators, conditionals, and repetition in programs, in collaboration with others. 4.PC.1 |
| **Impacts of Computing** 4.IC | **1** Identify laws and tools which help ensure that users of varying abilities can access electronic and information technology. 4.IC.1 |
| | **2** Explain how hardware and applications can enable everyone, including people with disabilities, to do things they could not do otherwise. 4.IC.2 |