

## CURRICULUM CORRELATION

The Computer Science Teachers Association (CSTA) is a membership organization with the mission of empowering, engaging, and advocating for K-12 computer science teachers worldwide. The CSTA has developed the **CSTA K–12 Computer Science Standards** to “delineate a core set of learning objectives designed to provide the foundation for a complete computer science curriculum and its implementation at the K–12 level.” The following table is Thames & Kosmos’ analysis of how the lessons in this kit correlate to the CSTA standards.

Curriculum Identifier	Grades	Standard Description	Concept	Correlation to this Kit
1A-AP-08	K–2	Model daily processes by creating and following algorithms (sets of step-by-step instructions) to complete tasks.	Algorithms	In Lesson 1, children create an algorithm to make a sandwich. In many lessons, children write programs to model the daily activities of the characters described in the stories.
1A-AP-09	K–2	Model the way programs store and manipulate data by using numbers or other symbols to represent information.	Variables	Covered in the lessons that use the number cards, especially the math lessons
1A-CS-03	K–2	Develop programs with sequences and simple loops, to express ideas or address a problem.	Control	Covered in all lessons, especially those involving simple loops
1A-AP-11	K–2	Decompose (break down) the steps needed to solve a problem into a precise sequence of instructions.	Modularity	Covered in all lessons due to the step-by-step nature of the code cards, and especially in the lessons involving subroutines (functions)
1A-AP-12	K–2	Develop plans that describe a program’s sequence of events, goals, and expected outcomes.	Program Development	Covered by lessons in which children create programs on their own, especially Lesson 8
1A-AP-14	K–2	Debug (identify and fix) errors in an algorithm or program that includes sequences and simple loops.	Program Development	This will naturally come up in the course of testing and correcting the arrangement of code and map cards to get the robot to work as expected.
1A-AP-15	K–2	Using correct terminology, describe steps taken and choices made during the iterative process of program development.	Program Development	This can happen when parents or teachers engage with the children, asking them to describe their specific programs and how they developed them.
1B-AP-08	3–5	Compare and refine multiple algorithms for the same task and determine which is the most appropriate.	Algorithms	There are many lessons in which more than one program is suggested as a solution. For example, Lesson 9 shows four ways to write the code.
1B-AP-09	3–5	Create programs that use variables to store and modify data.	Variables	This is modeled in Math Lesson 4.
1B-AP-10	3–5	Create programs that include sequences, events, loops, and conditionals.	Control	Covered by any lesson in which a conditional statement is used, starting with Lesson 18.
1B-AP-12	3–5	Modify, remix, or incorporate portions of an existing program into one’s own work, to develop something new or add more advanced features.	Modularity	This is inherent to all lessons in which the child first follows the instructions to lay out the code cards as shown in the manual and then makes modifications to the code.