SUBJECT: CS/STEAM	**GRADE:** 1
Unit Title: Introduction to Sequencing and Algorithms	**Time Frame:** Cycles 1-9

UNIT OVERVIEW

- Students learning about sequencing & algorithms
- Students using coding program to practice creating algorithms
- Students using coding program to learn about coding algorithms

LRG	**CSTA STANDARDS**
- Critical Thinking - Growth Mindset - Digital Literacy and Technology Proficiency	E1-PRO-PD-04: Create code from an algorithm that includes sequence to solve a problem or express an idea. E1-SYS-SE-12: Describe how to keep devices and online accounts safe from unauthorized access.
COMPETENCIES	**LEARNING TARGETS**
I can create, critically analyze, test, and refine code to ensure it is efficient, and aligned with specified goals.	I can create algorithms to perform a task.
I can create, critically analyze, test, and refine code to ensure it is efficient, and aligned with specified goals.	I can think in sequential steps
I can recognize how to keep information safe and troubleshoot software and hardware problems.	I can keep my programming login information private

SUBJECT: CS/STEAM	**GRADE:** 1
Unit Title: Introduction to Loops and Events	**Time Frame:** Cycles 9-14

UNIT OVERVIEW

- Students learning about incorporating loops in algorithms and events in a program
- Students solving coding puzzles to practice loops and events

LRG	CSTA STANDARDS
- Critical Thinking - Grit & Resilience - Digital Literacy and Technology Proficiency	E1-PRO-PD-04: Create code from an algorithm that includes sequence to solve a problem or express an idea. E1-PRO-RD-06: Explain the function of code that includes an event and sequence. E1-SOC-HI-14: Compare how an everyday activity changed after a specific computing technology was introduced.

COMPETENCIES	LEARNING TARGETS
I can create, critically analyze, test, and refine code to ensure it is efficient, and aligned with specified goals.	I can use loops to identify patterns in a program.
I can create, critically analyze, test, and refine code to ensure it is efficient, and aligned with specified goals.	I can use inputs, outputs, and events to create an interactive program
I can choose and use technology wisely and I can use them safely to complete goals.	I can explain how technology helps people solve a problem.

SUBJECT: CS/STEAM	**GRADE:** 1
Unit Title: Computational Thinking	**Time Frame:** Cycles 15-20

UNIT OVERVIEW

- Students learning about sequencing using robots
- Students learning about thinking in sequential steps to get a robot through their maps

LRG	**CSTA STANDARDS**
- Critical Thinking - Communication - Collaboration - Responsibility	E1-ALG-PS-01: Decompose a problem or task into individual parts to develop an algorithm. E1-PRO-TR-07: Debug a program that includes a sequence of commands.

COMPETENCIES	**LEARNING TARGETS**
I can demonstrate an understanding of sequential algorithm design and examine the tradeoffs and impacts of a designed program and its broader effects on people.	I can break down steps needed to solve a problem
I can create, critically analyze, test, and refine code to ensure it is efficient, and aligned with specified goals.	I can test and debug a program to ensure it runs as needed.

SUBJECT: CS/STEAM	**GRADE:** 1
Unit Title: Sequencing and Loops with Manipulatives	**Time Frame:** Cycles 21-28

UNIT OVERVIEW	
- Students applying their knowledge of sequencing using robots - Students incorporating loops in their codes	
LRG	**CSTA STANDARDS**
- Communication - Collaboration - Responsibility	E1-ALG-IM-03: Explain how a change to an algorithm leads to a different outcome. E1-PRO-PD-04: Create code from an algorithm that includes sequence to solve a problem or express an idea.
COMPETENCIES	**LEARNING TARGETS**
I can demonstrate an understanding of sequential algorithm design and examine the tradeoffs and impacts of a designed program and its broader effects on people.	I can describe the goals of a program.
I can create, critically analyze, test, and refine code to ensure it is efficient, and aligned with specified goals.	I can think in sequential steps