

SUBJECT: CS/STEAM		GRADE: 3	
Unit Title: Sequencing and Loops		Time Frame: Cycles 1-8	
UNIT OVERVIEW			
<ul style="list-style-type: none">- Students expanding their learning about sequencing & algorithms- Students introduced to more advanced loops- Students using Code.org to practice coding skills			
LRG SKILLS AND DISPOSITIONS		PA STANDARDS	
<ul style="list-style-type: none">- Critical Thinking and Problem Solving: Completion of coding puzzles and tasks. (S4A)		1B.AP.15 - Test and debug (identify and fix errors) a program or algorithm to ensure it runs as intended 3.4.3.C3 - Recognize that all products and systems are subject to failure; many products and systems can be fixed	
COMPETENCIES		LEARNING TARGETS	
<u>Competency:</u> I can code a program to express an idea or solve a problem.		<ul style="list-style-type: none">• I can test and debug a program to ensure it runs as needed. (K1CSA1D4)	
<u>Competency:</u> I can navigate various digital devices as a tool.		<ul style="list-style-type: none">• I can log in and out of a programming system. (K1CSA3D1)	
<u>Competency:</u> I can approach a challenge with computational thinking.		<ul style="list-style-type: none">• I can identify patterns to create loops. (K1CSA2D2)	

SUBJECT: CS/STEAM		GRADE: 3	
Unit Title: Sequencing and Events		Time Frame: Cycles 9-14	
UNIT OVERVIEW			
- Students use Dot to complete various programming challenges			
LRG SKILLS AND DISPOSITIONS		PA STANDARDS	
- Creativity and Innovation: Application of algorithms to complete a task. (S3A)		1B.AP.10 - Create programs that include sequences, events, loops, and conditionals	
COMPETENCIES		LEARNING TARGETS	
<u>Competency:</u> I can code a program to express an idea or solve a problem.		<ul style="list-style-type: none">I can use inputs, outputs, and events to create an interactive program. (K1CSA1D1)	
<u>Competency:</u> I can navigate various digital devices as a tool.		<ul style="list-style-type: none">I can connect to devices via bluetooth. (K1CSA3D4)	

SUBJECT: CS/STEAM		GRADE: 3	
Unit Title: Events and Conditionals		Time Frame: Cycles 15-20	
UNIT OVERVIEW			
- Students use MakeyMakey and Scratch to create interactive programs			
LRG SKILLS AND DISPOSITIONS		PA STANDARDS	
- Critical Thinking and Problem Solving: Completion of coding puzzles and tasks. (S4A)		1B.AP.12 - Modify, remix, or incorporate portions of an existing program into one’s own work, to develop something new or add more advanced features 1B.CS.03 - Determine potential solutions to solve simple hardware and software problems using common troubleshooting strategies 1B.AP.11 - Decompose (break down) problems into smaller, manageable subproblems to facilitate the program development process	
COMPETENCIES		LEARNING TARGETS	
Competency: I can code a program to express an idea or solve a problem.		● I can create a program that uses conditional statements. (K1CSA1D2)	
		● I can incorporate portions of an existing program to create my own work. (K1CSA1D3)	
Competency: I can navigate various digital devices as a tool.		● I can troubleshoot hands-on devices. (K1CSA3D2)	
		● I can save my work on a device (K1CSA3D3)	

SUBJECT: CS/STEAM		GRADE: 3	
Unit Title: Sequencing, Events, Conditionals		Time Frame: 21-28	
UNIT OVERVIEW			
- Students use Dash to complete various design challenges			
LRG SKILLS AND DISPOSITIONS		PA STANDARDS	
- Collaboration and Teamwork: Work with a partner using manipulatives. (S1A) - Critical Thinking and Problem Solving: Completion of coding puzzles and tasks. (S4A)		1B.AP.08 - Compare and refine multiple algorithms for the same task and determine which is more appropriate 1B.AP.15 - Test and debug (identify and fix errors) a program or algorithm to ensure it runs as intended 3.4.3.C1 - Recognize design is a creative process and everyone can design solutions to problems	
COMPETENCIES		LEARNING TARGETS	
Competency: I can approach a challenge with computational thinking.		● I can break down steps needed to solve a problem (K1CSA2D1)	
Competency: I can code a program to express an idea or solve a problem.		● I can test and debug a program to ensure it runs as needed. (K1CSA1D4)	