

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				
<ul style="list-style-type: none"> - Students use Dot to complete various programming challenges 				
LRG SKILLS AND DISPOSITIONS	PA STANDARDS			
<ul style="list-style-type: none"> - 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				
<ul style="list-style-type: none"> - Students use MakeyMakey and Scratch to create interactive programs 				
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.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			
<u>Competency:</u> I can code a program to express an idea or solve a problem.	<ul style="list-style-type: none"> • I can create a program that uses conditional statements. (K1CSA1D2) 			
	<ul style="list-style-type: none"> • I can incorporate portions of an existing program to create my own work. (K1CSA1D3) 			
<u>Competency:</u> I can navigate various digital devices as a tool.	<ul style="list-style-type: none"> • I can troubleshoot hands-on devices. (K1CSA3D2) 			
	<ul style="list-style-type: none"> • 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				
<ul style="list-style-type: none"> - Students use Dash to complete various design challenges 				
LRG SKILLS AND DISPOSITIONS	PA STANDARDS			
<ul style="list-style-type: none"> - 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			
<u>Competency:</u> I can approach a challenge with computational thinking.	<ul style="list-style-type: none"> • I can break down steps needed to solve a problem (K1CSA2D1) 			
<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) 			