

Grade 4

Distance Learning Module 10: Week of: 6/8/2020-6/12/2020

Grade 4 Computer Coding - *Modified from [Unit 2 - Computational Thinking](#)*

Targeted Goals from Stage 1: Desired Results

Content Knowledge: Algorithms are precise sequences of instructions for processes that can be executed by a computer or other operator, and are implemented using programming languages. People write programs for computers to execute algorithms. Programmers debug and revise their programs to improve the stability and efficiency of the program and end user experience.

Vocabulary: algorithm, program, debug, perseverance, frustrated, conditional, loop

Skills:

- Write an algorithm
- Write basic code using a block language
- Predict where a program will fail.
- Modify an existing program to solve errors using a variety of strategies
- Use loops to code efficiently, using as few steps as possible to solve a problem: the repeat block
- Use conditional statements in coding to arrive at determined outcomes: if/then, while, until

Expectation: Students will learn and apply strategies for correcting coding errors, and use loops to code efficiently.

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Using playing cards, students will create a game based on conditionals, and play it with a family member	Weekly Introductory Video Assignment: Conditionals with Cards video My conditionals game	Write up and submit the game you've created
Tuesday:	Meet! Types of conditionals: If/then, while, until	Nothing due
Wednesday: Students will use angles and measures to create art in code. Students will use repeat blocks to make code more efficient.	Code.org: Lessons 11-12: If/Else with Bee, While with a Farmer	Code.org through lessons 11-12. Optional: Lesson 9
Thursday:		Nothing due

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Friday: Students will use loops to make code more efficient.	Meet! Video: Loops! Coding with Rey and BB-8 Minecraft in Code.org: if/then/else, While, Until loops	completed lessons 10, 13 Optional: Lesson 14

Week criteria for success (attach student checklists or rubrics):

Supportive resources and tutorials for the week (plans for re-teaching):

Need help? Send a message, and schedule a meet!