Lesson 7 - Working Collaboratively on a Build (Planning)

Objectives

I can work collaboratively with my peers to construct a build.

Standards

- 4-6.CT.4 Decompose a problem into smaller named tasks, some of which can themselves be decomposed into smaller steps.
- 4-6.CT.5 Identify and name a task within a problem that gets performed multiple times while solving that problem, but with slightly different concrete details each time.
- 4-6.CT.8 Develop algorithms or programs that use repetition and conditionals for creative expression or to solve a problem.

Vocabulary

Loop - a structure that repeats a set of instructions (algorithms) until it is told to stop.

Nested Loop - A loop within a loop.

Conditional - An action that occurs if something specific happens.

Gradual Release of Responsibility (I do/We do/You do)

I Do/We Do

Lead-in: You have successfully completed your field missions! Now we need your help!

<u>YOUR BRIEF MISSION</u>

Over the next 4 days, you will be working with your classmates in the revisiting biomes world. In multiplayer mode, you will work together to figure out how to manage the five different tasks four in four different areas of the island.

o   Build a bridge

o   Complete the maze

o   Clean up the trash

o   Build a fence

o   Build a tower

SUCCESS CRITERIA

Over the next several days, you will be working with your classmates in the Revisiting Biomes world. In multiplayer mode, you will work together to figure out how to manage the five different tasks found in four different areas of the island. You must:

- Create at least 2 algorithms to solve the problem/task
- Utilize repeat loops, conditional loops, or nested loops in the program
- Test and debug your program as needed

You Do:

Day 1

Before you begin actually coding your solutions, your group should go into the Revisiting Biomes world and independently look around at the tasks to be completed to inspire some possible solutions. After you have viewed the Revisiting Biomes world, come together to create a plan. Your group needs to:

PLANNING			
	EXCEEDS (3)	**MEETS (2)**	**APPROACHES (1)**
BRAINSTORM SOLUTIONS	THREE OR MORE SOLUTIONS ARE GENERATED FOR EACH TASK	TWO SOLUTIONS ARE GENERATED FOR EACH TASK	ONE SOLUTION IS GENERATED FOR EACH TASK
SELECT ORDER OF TASK(S)	TASKS ARE ORDERED AND JOB RESPONSIBILITIES ARE ASSIGNED	TASKS ARE ORDERED	TASKS ARE NOT ORDERED
CREATE PSEUDOCODE	PSEUDOCODE IS WRITTEN WITH WORDS AND INCLUDES IMAGES/FLOWCHARTS	PSEUDOCODE IS WRITTEN WITH WORDS	PSEUDOCODE IS NOT COMPLETED