SCRATCH CHALLENGES SKILLS TO MASTER

Bronze Level

a. Perform mathematical calculations

b. Use pen commands to make drawings

c. Add/edit/remove new sprites, costumes, sounds, backdrops, effects to an existing program and create a script for it

d. Use the mouse to control the movement of a sprite

e. Use timing to simulate a conversation between two sprites

f. User layers to control the visibility of sprites when they overlap

Silver Level

g. Use key pressed to control the movement of a sprite

h. Randomly move a non-player character sprite

i. Use clones, sensing blocks, message broadcasting, global variables, stop commands

j. Ensure that all sprites start, point, rotate, and appear correctly

k. Create and use a procedure (make a block) with one or more parameters

l. Obtain user input and utilize it

m. Within an if block, use a variable in a Boolean expression

Gold Level

n. Make a sprite from a cutout of backdrop and control sprite placement

o. Use variables in a Boolean expression with logical operators in conjunction with if-then statements

p. Validate user input

q. Use nested loops

Platinum Level

r. Determine the number of characters in a string and use that information in your program logic

s. Access the individual characters of a string

t. Insert and remove characters from a string

u. Create, populate, sort, and use static and dynamic lists (using the Scratch interface)

v. Use multiple lists to create records and access the records in the program