

Name:

Warm up	
Give two benefits to using functions:	
What must you do to execute the code in a function?	
In your own words, what is a parameter?	
What are some reasons a variable needs to be a parameter?	
What is a local variable?	
What are some reasons a variable would be local?	

Functions, Parameters and Local Variables - Part 2 Activity #1

Go through the [lesson slide deck](#) on functions, parameters and local variables. Fill out the charts for each problem you complete.

A 🌶️🌶️🌶️	
What is the parameter?	
Why is it a parameter?	
What are the local variables?	
Why are they local variables?	
What will a function call look like?	

```

while True:
    # Start game with button B
    if buttons.was_pressed(BTN_B):
        # Reset the board for each game
        reset()
        # Select first random number
        num1 = random.randrange(6) + 1
        if num == 1:
            one_roll()
        elif num == 2:
            two_roll()
        elif num == 3:
            three_roll()
        elif num == 4:
            four_roll()
        elif num == 5:
            five_roll()
        else:
            six_roll()
        sleep(delay)

```

B 🌶️🌶️🌶️	
What would you call the function?	
What are the variables needed?	
What are the parameters?	
What are the local variables?	
Does it need a return?	
What will a function call look like?	

```

if set_list == "a":
    my_image = a_list[choice]
else:
    my_image = b_list[choice]

if type(my_image) == tuple:
    display.fill(my_image)
else:
    display.show(my_image)

if buttons.was_pressed(BTN_R):
    choice = choice + 1
    if choice > LAST_INDEX:
        choice = 0
    
```

C 🌶️🌶️🌶️	
What would you call the function?	
What are the variables needed?	
What are the parameters?	
What are the local variables?	
Does it need a return?	
What will a function call look like?	

```

while True:
    num = random.randrange(sides) + 1
    if buttons.was_pressed(BTN_A):
        display.clear()
        display.draw_text("Rolling", scale=3,
            sleep(delay-0.7)
        display.draw_text("Rolling", scale=3,
            sleep(delay-0.4)
        display.clear()
        display.draw_text(str(num), scale=20,
            sleep(delay)
        display.clear()
    
```

Functions, Parameters and Local Variables - Part 2 Activity #2

After going through the information for Activity 2, answer the questions about the example. Then create the function for the example and call the function.

Example 🌶️🌶️🌶️	
What information is used in each of the four functions?	
Write assignment statements for each piece of information. The first one is done for you.	message = "Hold Button R"
What would you call the function? Write a function definition with parameters for this function:	
Write a function call for the function:	
Answer the questions above and discuss with your classmates. Then write the code.	
The function code with multiple parameters:	
Function call for your code:	

```
def option_R():
    display.show("Hold Button R")
    sleep(1)
    pressed = buttons.is_pressed(BTN_R)
    if pressed:
        pixels.set(3, GREEN)
    else:
        pixels.set(3, RED)
    sleep(1)
```

Reflection	
What did you learn about functions, parameters and local variables from these two lessons?	

SUCCESS CRITERIA:

- Decide a function name for a section of code
- Determine parameters for a function
- Determine local variables for a function
- Write a function call with multiple parameters
- Write a function that has multiple parameters