Check Your Understanding - Functions, Parameters and Local Variables

Name:

Problem #1 🌶	
What would you call the function?	def ending (answers can vary)
What are the variables needed?	count
What are the parameters?	count
What are the local variables?	none
Does it need a return?	no
Write a function call:	ending(count) or ending(3) or ending(4)

```
# Ending message
if count == 4:
    display.clear()
    display.draw_text("You WON", scale=4,

else:
    display.clear()
    display.draw_text("You LOST", scale=4,
```

Problem #2 🌶	
What would you call the function?	def instruction (answers vary)
What are the variables needed?	delay
What are the parameters?	delay
What are the local variables?	none
Does it need a return?	no
Write a function call:	instruction(delay)

```
    pixels.set(3, BLACK)
if buttons.was_pressed(BTN_A):
    audio.mp3("sounds/welcome")
if buttons.was_pressed(BTN_B):
    display.show(pics.HAPPY)

sleep(delay)
display.fill(BLACK)
display.show("Press a Button!")
sleep(delay)
```

Problem #3 🌶🌶	
What would you call the function?	def display_image (answers vary)
What are the variables needed?	my_image, choice (my_list is a list and is automatically available throughout the program)
What are the parameters?	choice
What are the local variables?	my_image
Does it need a return?	no
Write a function call:	display_image(choice)

```
if buttons.was_pressed(BTN_L):
    choice = 4
if buttons.was_pressed(BTN_R):
    choice = 5

my_image = my_list[choice]

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

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FIRIA LABS

Problem #4 🌶🌶	
What would you call the function?	def random_color (answers vary)
What are the variables needed?	red, green, blue, color
What are the parameters?	none
What are the local variables?	red, green, blue, color
Does it need a return?	Yes – color
Write a function call:	**color = random_color()**

```
while True:
    red = random.randrange(0, 255)
    green = random.randrange(0, 255)
    blue = random.randrange(0, 255)
    color = (red, green, blue)

    pixels.set(0, color)

    red = random.randrange(0, 255)
    green = random.randrange(0, 255)
    blue = random.randrange(0, 255)
    color = (red, green, blue)
```

Problem #5 🌶🌶🌶	
What would you call the function?	def roll_the_dice() Answers can vary
What are the variables needed?	num, delay
What are the parameters?	num, delay
What are the local variables?	none
Does it need a return?	no
Write a function call:	roll_the_dice(num, delay) roll_the_dice(num, 1) roll_the_dice(3, 2) Or any variation

```
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)
```

Problem #6 🌶🌶🌶	
What would you call the function?	def see_image() Answers can vary
What are the variables needed?	set_list, my_image, a_list, choice
What are the parameters?	set_list, choice
What are the local variables?	My_image **Note** – the list (a_list or b_list) are global and do not need to be a parameters or local variables
Does it need a return?	no

```
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
```

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Write a function call:	see_image(set_list, choice) see_image("a", choice) see_image("b", 3) Or any combination	