



## Fall 2021 Python Lesson 5.4

Dr. O'Brien  
Herbert Lehman High School  
Oct. 21, 2021



Dr. O'Brien 10/21/21

### Do now

be sure to: find seat near the board. Get out your binder and answer the do now questions below. Show all work or answer each question with a complete sentence.

In *The Squid Game*, the old man provides useful advice that helps his team win the tug of war game. This is an example of coaching.

- A. Describe an experience where you've been "coached". This could be in school, a sports team, or somewhere else.
- B. How was the coach in this experience effective in helping you do better?
- C. How could this example be applied to coding?



Class: Python Goal: Use functions, loops, and artistic effects to generate works of art

- A.




Dr. O'Brien 10/21/21

## Coaches

1. Today (and every day until MP1 ends) Dr. O'Brien will select two coaches.
2. Coaches should...
  - A. Answer student questions.
  - B. Provide hints.
3. Coaches shouldn't...
  - Talk to one student for for than a few minutes.
  - Touch other students keyboards. Ever.
  - Just tell students exactly what to do.

Class: Python Goal: Use functions, loops, and artistic effects to generate works of art



Dr. O'Brien 10/21/21

**The rest of the day**  
 be sure to: find your **assigned** seat. Log in to CodeHS. Begin work!


**A. Find your *assigned* seat** (ask Dr. O'Brien)

**B. Read through the MP1 requirements** to the right.

**C. Begin work!** Raise your hand quietly if you have any questions

**MP1 requirements:**

1. Complete all CodeHS Lessons, Unit 2
2. Complete Assessment #1
3. Complete Turtle Art project (Assessment #2)



**Class:** Python **Goal:** Use functions, loops, and artistic effects to generate works of art

- Make sure students are working quietly. See problem guides for specific Python activities.


Frequently asked questions:

+I don't know what to do!?! Make sure to carefully read the instructions.

Take notes when watching the video.

+What are you trying to make tracy do?

+how can I figure out why my code doesn't work? Try getting out a piece of paper, and following your commands yourself. What do you draw. Where do things go wrong?




Dr. O'Brien 10/21/21

**Warm up (answer in notebook)**


Examine the picture to the right:

- Do you think a computer was used to create this image? Explain why or why not.
- In what ways might computers be useful to create art? Explain in at least one complete sentence.



**Class:** Python **Goal:** Use functions, loops, and artistic effects to generate works of art

+for students are starting the art project (this and subsequent slides):  
 +In what ways might computers be detrimental to creating art?  
 +What sorts of computational structures are needed to create an image like the one  
 This is something called 'algorithmic art'.




Dr. O'Brien 10/21/21

**Making art with Turtle Graphics**  
**Part 1: Find/Create an image**

You need an image to reproduce using Turtle Graphics.

For any image, be sure to **include some sort of pattern that can be reproduced using Python & Turtle Graphics** (Check w/ Dr. O'Brien if you're not sure).



**Class:** Python **Goal:** Use functions, loops, and artistic effects to generate works of art

- Examples are on the right.  
 You'll need to use color, functions, and loops in your project.



Dr. O'Brien 10/21/21

**Making art with Turtle Graphics**  
**Part 1: Find/Create an image**

two options:

1. Create your own image, take a picture and post it in your google doc.
2. Find an image online. If you find the image online, write a paragraph explaining why you think it's appropriate, along with what you like about it. Paste image and description into your Google Doc.

**Complete part 1 by the end of period !!!!**

**Class:** Python **Goal:** Use functions, loops, and artistic effects to generate works of art



Dr. O'Brien 10/21/21

**Making art with Turtle Graphics**  
**Part 2: recreate image using turtle graphics**  
Your image should include all of the techniques we've learned in class

**You need the following:**

- a. Use loops
- b. use of functions
- c. use of artistic effects (of course!)

**Class:** Python **Goal:** Use functions, loops, and artistic effects to generate works of art