

# AP COMPUTER SCIENCE PRINCIPLES QUARTERLY

Goldie's Math Emporium

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## AP CSP CREATE TASK

Monday, May 2nd 2022  
11:59 EST

## AP CSP EXAM

Monday, May 9th 2022  
12:00 PM Local Time

The AP exam for 2022 is business as usual this year and we have yet to hear if there will be any changes due to the COVID pandemic.

Last year, we had 3 options for testing dates, and it was up to each school to determine what date would work best for their students. In addition to the various testing dates, schools also had the option to take the test on paper or online.

This year, there have been no announcements about changing the dates or having a virtual exam. Plan on having the exam, on paper only, on the listed date to the left.

# PROGRAMMING LANGUAGE

What programming language do I teach?



By the start of December, I have covered the following Units:

- Unit 1: Introduction to Computer Science
- Unit 2: Digital Information
- Unit 3: The Internet
- Unit 4: Big Data and Privacy

Unit 5 is Programming and it is a BIG unit that takes me all of November, December, January, and February. Then I leave all of March for working on the Create Performance task and then April is AP exam review, as well as some "advanced topics" that go beyond what the course curriculum requires.

Having 4 months to teach programming means I have enough time to cover two programming languages: Javascript and Python. Students love the chance to learn both, and it is actually easy for them to pick up Python after learning all of the coding basics through Javascript.

To teach Javascript, I use [code.org](https://code.org). I usually edit the materials (they give amazing lesson plans!) and condense down a lot of what they provide. (Note: The materials that I use to teach Javascript are NOT included in my curriculum, since I use content that is not my own.) I enjoy their App Studio and I think it does a great job of really having students interact with code. On the next page, you can see how I pace myself through their coding units!

After I teach all the programming concepts in Javascript, I then switch over to my curriculum to teach Python. My notes go over all of the concepts they have covered in Javascript, but it reiterates them in the APCSP pseudocode as well as Python. We then use [Replit](https://replit.com) to code Python.



So I said that I condense down the information from [code.org](https://code.org), but what lessons do I actually cover?? On the next page, I lay out what my four coding months look like!

## CODE.ORG CODING

What lessons do I cover from [code.org](https://code.org) and my own curriculum?

# November

Week of 11/8

- Unit 3 Lesson 1: Intro to Apps
- Unit 3 Lesson 2: Intro to Design Mode
- Unit 3 Lesson 3: Project Part 1
- Unit 3 Lesson 4: Project Part 2
- Unit 3 Lesson 6: Intro to Programming

Week of 11/15

- Unit 3 Lesson 7: Debugging
- Unit 3 Lesson 8: Project Part 3
- Unit 3 Lesson 9: Project Part 4
- Unit 3 Lesson 10: Project Part 5

# December

Week of 11/29

- Variables Week
- Unit 4 Lesson 1: Variables Explore
- Unit 4 Lesson 3: Variables Practice
- Unit 4 Lesson 4: Variables Make

Week of 12/6

- Conditionals Week
- Unit 4 Lesson 5: Conditionals Explore
- Unit 4 Lesson 7: Conditionals Practice
- Unit 4 Lesson 8: Conditionals Make

Week of 12/13

- Practice Variables and Conditionals
- Finals Week

# January

Week of 1/10

- Review Variables and Conditionals
- Functions Week
- Unit 4 Lesson 9: Functions Explore/Investigate
- Unit 4 Lesson 10: Functions Practice
- Unit 4 Lesson 11: Functions Make

Week of 1/17

- Practice PT – Decision Maker App
- Unit 5 Programming Test Part 1

Week of 1/24

- Lists Week
- Unit 5 Lesson 1: Lists Explore
- Unit 5 Lesson 3: Lists Practice
- Unit 5 Lesson 4: Lists Make

If you are pressed for time, while the App Lab is great for making neat apps, Python is a great beginner programming language that the students can pick up pretty easily in a few weeks. Not everyone is able to have months to complete the programming Unit, so consider teaching Python if you are pressed for time.

# February

Week of 1/31

- Loops Week
- Unit 5 Lesson 5: Loops Explore
- Unit 5 Lesson 7: Loops Practice
- Unit 5 Lesson 8: Loops Make

Week of 2/7

- Linear and Binary Search
- Parameters and Return Values in Procedures
- Libraries
- Algorithmic Efficiency

Week of 2/14

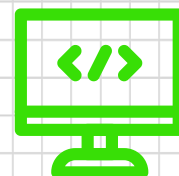
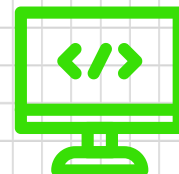
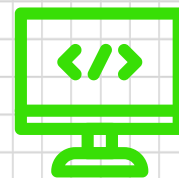
- Python Notes Lesson 1: Sequencing
- Python Notes Lesson 2: Selection
- Python Notes Lesson 3: Iteration
- Python Notes Lesson 4: Procedures

Week of 2/21

- Python Notes Lesson 5: Lists
- Python Notes Lesson 6: Nested Conditionals and Iteration
- Python Notes Lesson 7: APCSP Robot
- Unit 5 Programming Test Part 2

# March

Create Performance Task!



**When I do the "Explore" lesson, those look more traditional in terms of guided student notes and lessons on the board. The "Practice" is us working in the App Lab together to code. The "Make" is them creating an app on their own.**

**I always skip the "Investigate" part of each topic because it really confuses my students and gets them pretty lost. I find that they are more successful with traditional guided notes and us going through the practice together, but your students might be different!**

**At the start of March, we go through examples of Create PTs, do one together as a class, and then they have their 12 hours of class time to complete the Create PT.**