Lesson 6.07a — Celebrity Lab

Overview

College Board 2019 Labs

In the summer of 2019, the college board released 4 new labs. Either the Celebrity Lab or TextExcel can be assigned after the completion of Unit 6.

Objectives — *Students will be able to...*

- **Complete** a long-form lab, using classes, objects, two dimensional arrays of objects, array traversing algorithms, program analysis, while/for loops.

Assessments — *Students will...*

- **Complete** the College Board's AP CS A Data Lab.Students will answer end of activity Check your understanding and open-ended activity.

Homework —

- A list of homework assignments is listed in the Pacing Guide

Materials & Prep

- **Projector and computer**
- **Celebrity Lab** Teacher's Guide
- **Classroom copies** of the Data Lab Student Guide
- **Associated Data Lab & Data Lab Extension** Files

Pacing Guide: Day 1

Section	Total Time
Student Activity 1	Full class
Grade student notebooks	During class
Homework:*Outline Chapter 9*	TONIGHT

Pacing Guide: Day 2

Section	Total Time
Student Activity 2	Full class
Check student outlines for completeness	During class
Homework:*Read and outline Chapter 4 in Barron's review book*	TONIGHT

Pacing Guide: Day 3

Section	Total Time
Student Activity 3	Full class
Homework:*Take the Chapter 4 quiz. Grade your answers.*	TONIGHT

Pacing Guide: Day 4

Section	Total Time
Student Activity 4	Full class
Homework:*Read and outline Chapter 3 in Barron's review book.*	TONIGHT

Pacing Guide: Day 5

Section	Total Time
Student Activity 5	Full class
Check Barron's review books for highlighting	During class
Homework:*Review Chapter 9.*	TONIGHT

Pacing Guide: Day 6

Section	Total Time
Student Activity 5 (day 2)	Full class
Check note-taking	During class
Homework:*Review Chapter 9.*	TONIGHT

Pacing Guide: Day 6

Section	Total Time
Student Activity 5 (day 3)	Full class
Homework:*Submit 5 questions for review.*	TONIGHT

Procedure

All guides, sample code, answer code, and example code may be found by logging into the College Board AP Audit side and downloading the Steganography Lab materials.

About Barron's

- Barron's is an AP CS A review book that some schools provide students. If your school doesn't provide Barron's there are many alternative homework assignments that can be found at codingbat.com/java.

- Alternatively, you can save time spent on the lab by checking activities as homework.

General Project Notes

Before letting students begin the projects, ask students what resources are available to them so they can help themselves before calling you over. (Notebooks, textbook, class handouts, student work and posters hanging around the room, online resources.

- If you've chosen to introduce TextExcel earlier, you can assign portions of TextExcel as homework here to save time later in the course. TextExcel like FracCalc takes a lot of in and out of class time to complete, and time saved here saves time for AP test review.

Accommodation and Differentiation

In ELL classrooms, read all directions aloud before breaking into individual practice, and allow up to twice the amount of time for completion of the lab.

- To save time on the rest of the lab, don't spend too much time reviewing binary numbers, and restrict color exploration (Activity 2) to ~20 minutes.

- Use the tactile exercises as suggested on page 6 of the Teacher's guide (candy exercise and exploring the digital camera).

As needed, allow students to pair up to help each other with reading comprehension (but remind students that they each must submit their own code). Each day that you begin the lab, start with a quick survey of student concerns and questions.

Forum discussion

Lesson 6.07a Celebrity Lab (TEALS Discourse account required)