APCS FINAL PROJECT   **Worth**: 100 points in TEST category

OPTION 1 - MAKE YOUR OWN PROGRAM!

What to do:

1) Think of a program.
2) Write up a proposal for Mrs. D to approve (by 5/10)
    a) Name of the project
    b) Names of students working on the project (1-3 people)
    c) Make a "pitch." Sell your project. Start with a one-sentence "hook" that grabs my attention. Add details about why it will be an interesting product.
3) Program in class from 5/8 to 6/2
4) On the day of the "final" in June, we will have a Project Fair.   Programs should be user-friendly, easy to use and understand. You will take turns staying at your station to explain your program, and wandering around looking at your classmates' programs. It will be fun :)

Grading:

1) 5 points for well-written pitch.
2) 40 points for working every day in class on your project without distraction
3) 25 points for including basic Java topics. (Or those from another programming language of your choice!) Examples of essentials that you MUST include:
    a) Constructors
    b) Instance Variables
    c) Methods (with and without parameters)
    d) Runner Class
    e) "for" / "if" / "return" /
    f) User input: "keyboard.next()"
4) 20 points for using more advanced topics. Examples to choose from:
    a. Use of Arrays/ArrayLists
    a. Using Files and .next() to read from data files
    b. Use of Classes to create Objects
    c. Use of JFrame for graphics
5) 10 points for classmates' review of program. Judged on:
    a.   Is it interesting?
    b.   Is it easy to use?

Examples of Programs:

1) Games! Yahtzee, Craps, Blackjack, Checkers, etc.
    a) A+++: add some A.I. to your game. Revise tic tac toe or Pong so you play the computer.
2) Personality Tests (Like Buzzfeed. "Which Harry Potter character are you?" etc)
3) Astrology: Given a birthday, give the user's sign. Add details like their personality profile. Even better, have them put in the birthday of their BFF or boyfriend/girlfriend and say whether it's a good match.
4) Sports. Pick a sport. Allow the user to choose a team and give them the stats. Even better: pick two teams and predict the winner
5) Anything! Make a pitch and give it a try.

OPTION 2 - LEARN A NEW PROGRAMMING LANGUAGE

Codecademy and Khan Academy offer a great ways to learn a new coding language! Spend your class time doing online learning and expand your coding skill set! Course possibilities include:

1) **HTML/CCS**: Learn how to create websites
2) **jQuery** (next level) : Learn to make those websites interactive
3) **Python**: Like java, a popular programming language used by companies like YouTube
4) **Ruby**: And up-and-coming popular programming language like Python and JAVA
5) **SQL**: a language used to manipulate "big data." This will be a valuable skill as more and more companies "try to data mine."

Grading:

1) 60 points for coming to class and working every day without distraction. If you finish one course, you'll start another.
2) 20 points for completing at least one course
3) 10 points for choosing and refining one of the assigned programs to show your classmates.
4) 10 points for classmates' review of program. Is it interesting? Is it fun?

Note: We are done with the AP so we're done with stress and homework! Yay! But we still need to use our time in class every day to write code, so my expectation is that you won't try to sneak in homework for other classes or play games you didn't write.