AP Biology Summer 2020

I would like to take a moment to welcome you to next year’s AP Biology class, and help you prepare for this upcoming challenge.

AP Biology involves a lot of hard work, but it can be incredibly rewarding. We have a lot of interesting things planned, and I am looking forward to an exciting year with all of you. Here are some things you will need to do over the summer to prepare.

1. Please write me a letter! Email to jrogers@stpaulsmd.org, any time before school begins!
   a. This letter will be your way of introducing yourself to me. It should be 1 page, typed, single-spaced with one-inch margins, in black Times New Roman or Cambria 12-point font.
   b. Your letter should include:
      i. Who you are.
      ii. A description of something important to you (your family, friends, art, etc.).
      iii. Why you are interested in taking AP biology. iv. What you think your biggest challenge in the course will be.
      v. Any information you feel I should know about you.

2. You will need to set up a Mastering Biology account and also complete summer review assignments there before school begins. I have not received the codes as yet and will contact you when they arrive and when you will be able to set up your account. Stay tuned!

3. Purchase and read the following book and complete the questions below. It is written at a college level and is engaging and interestingly written.

   I. Instructions: Read the book “Your Inner Fish” by Neil Shubin

   II. From the Book, write a 1.5 page essay, single spaced. 12-point font. Address the following questions in your essay:
      a. What did you find interesting about your reading and why?
      b. What 3 new things did you learn that you might remember in 5 years?
      c. Pick three chapters you found most interesting and summarize what you learned and why it is significant to our understanding of Biology and evolution. Be specific with examples and details from the book. Reference page numbers where your information was explained.

Complete each assignment below. Bring your printed out and completed assignments to class the first week. Be ready to discuss the book and take a quiz within the first two weeks of school.
III. Assignment One: Write a short paragraph describing two things you learned about the evolution of our body parts. Explore your inner animals: http://media.hhmi.org/biointeractive/click/explore-your-inner-animals/?_ga=2.135346614.623203783.1526393883-2001751819.1523984600

IV. Assignment two: Using the “Skeletons reveal Human and Chimpanzee evolution” worksheet complete the assignment using the link. When you go to the link, click “launch interactive” at the top of the page. https://www.hhmi.org/biointeractive/skeletons-reveal-human-and-chimpanzee-evolution

V. Assignment three: Watch the following film: “The Origins of a Species, Making of a theory” Answer the following questions about the film. https://www.biointeractive.org/classroom-resources/origin-species-making-theory

a. Who was Alfred Wallace and why is he significant to our understanding of Biology? What happened to the poor fellow?
b. Briefly summarize some interesting facts about Charles Darwin’s life.
c. What was significant about the Fossils Darwin found. What question did it raise in his thinking?
d. What did the locals tell Darwin about the tortoises on the Galapagos Islands?
e. What does it mean when it says, “the origin of species was natural not divine?” Why was it problematic at that time?
f. Describe 3 pieces of evidence and contributions Wallace made to this new idea about species. Be specific and use examples.
g. What does it mean when they say every “species is a modified form of an older species?”
h. What does the “Wallace line” mean?
i. Ultimately, what explains the distribution of species?
j. How are variation, massive death and reproduction important in Wallace’s ideas
k. How do Darwin’s ideas and Wallace’s ideas support each other? What was this new idea called?
l. Describe something significant you learned from this film that you never knew.