

**West Deptford High School  
AP BIOLOGY  
Summer Assignment 2018**

<b>AP Biology</b>	<b>Mrs. Castone</b>
<b>mcastone@wdeptford.k12.nj.us</b>	<b>2 Due Dates: September 1 + 6, 2018</b>
<b>Meets AP College Board approval</b>	
<b>Topic: AP bio field experience</b>	
<b>Purpose; Major Bio concepts</b>	
<b>Text/Novel(s) &amp; Brief Description: A non-classroom AP Biology experience</b>	
<b>Approximate Time on Task: 10 hours</b>	
<b>Suggested Timeline: Start immediately and finalize project mid August</b>	
<b>How It Will Be Assessed : Assignment one is 15 points based on a timely completion, assignment two is 75 points based on an electronic presentation of field findings</b>	

**AP Biology Summer Assignment 2018 (wording taken from M. Oster; OCHS)**

Dear AP Biologist,

Welcome to the wonderful world of AP Biology! In order to experience the best course possible it is very important that each student enter the class armed with the knowledge that Advanced Placement Biology is designed to be the equivalent of a college introductory course usually taken by Biology majors during their first year of study. Therefore, this course requires that the student to possess a level of maturity and sophistication found in the typical university undergraduate. We will use an electronic college textbook, conduct college level labs, and our tests and exams will be analogous to those administered by undergraduate professors. Please keep in mind that AP Biology differs significantly from a typical Honors biology course in the depth and breadth of content that is presented and particularly, in the time and effort required of students. We will delve more deeply into the topics that were first introduced to you in your sophomore or freshman biology course with a focus on student – directed inquiry laboratory investigations. This summer assignment has been designed for one main purpose: To introduce you to major concepts from AP Biology through non-classroom methods of learning. With that in mind, it is imperative that you complete the following 2 assignments by their individual due dates:

**Assignment #1: Meet Your Teacher** – Send an email to [mcastone@wdeptford.k12.nj.us](mailto:mcastone@wdeptford.k12.nj.us) and type “AP Bio: Introduction to (your name)” in the subject. Include the following:

- Your full name and the name you prefer to be called
- Interests & Family (music, art, sports, job, family, pets, etc.)
- Why you are taking AP Biology, what you are most anxious about in AP Biology and what you are most looking forward to.
- A school appropriate picture of yourself.
- Use clearly written, full sentences. Do not abbreviate words like you are texting with a friend. This is a professional communication like you would have with a college professor, and it’s important to practice for the near future!

**DUE: September 1, 2018**

### **Assignment #2: Scavenger Hunt**

For this summer assignment, you will be familiarizing yourself with commonly used science terms by “collecting” assigned items and taking a photograph (with your phone or digital camera). *You should collect your photographs on a software of your choice (PPT, Prezi, etc.), using appropriate explanations / descriptions.* Your completed photo journal will be graded as your first lab activity. **Electronic only**... No paper submissions!!

- ORIGINAL PHOTOS ONLY! No internet images allowed! The best way to **prove** that you are the photographer is to place a personal item (pen, coin, key, cell phone, etc.) in **all** of your photographs that only you could have added each time. (same image each time)
- **NATURAL ITEMS ONLY!**  
All items must be from something that you have found in nature (your neighborhood, yard, vacation spot, zoo is acceptable). Research what each term means and in what organisms it can be found, then go out and snap a picture!
- Videos, PPTs and/or Prezi’s are recommended
  - Electronic narrative suggested (speak slowly and clearly)
  - Electronic built-in sound track required
    - Must be school appropriate music
    - No lyrics recommended
    - Audible level so the narrative and/or your voice can talk over
- **TEAM WORK** - You may work with another student in the class (or other AP Bio class) to complete this project, but each student must complete his or her own project with a unique set of terms chosen. So working with other students means brainstorming, discussing, going on collecting trips together. It doesn’t mean using the same items and taking the same pictures. **Please** be considerate to all living organisms!

### **Scavenger Hunt List**

Choose 25 of the following 50 items to “collect”. You must use a different organism for each item. Each item is worth 3 points for a total of 75 possible points. **Due September 6, 2018**

**\*\*Sorry for the awkward numbering here\*\***

1. 1 of the 10 world biomes
2. plant carbohydrate
3. type of protein
4. evidence of different alleles for same trait

5. organism in kingdom fungi
6. organisms in kingdom protista
7. angiosperm
8. gymnosperm
9. food web
10. adaptation of an animal
11. adaptation of a plant
12. altruistic behavior
13. analagous structures
14. anther & filament of stamen
15. flower ovary
16. autotroph
17. Batesian mimicry
18. Mullerian mimicry
19. biological magnification
20. coevolution
21. commensalism
22. parasitism
23. dominant vs. recessive phenotype
24. ectotherm
25. endotherm
26. enzyme
27. eukaryote
28. exoskeleton
29. genetic variation within a population
30. genetically modified organism
31. hermaphrodite
32. heterotroph
33. homologous structures
34. hydrophilic
35. hydrophobic
36. introduced species
37. keystone species
38. K-strategist
39. r-strategist
40. phloem
41. pollen
42. pollinator
43. predation
44. prokaryote
45. radial symmetry (animal)
46. redox reaction
47. succession
48. taxis
49. kinesis
50. vestigial structure

PLEASE SAVE ALL ORIGINAL PHOTOS IN A FILE FOLDER ON YOUR COMPUTER.  
WE WILL BE LOOKING AT THEM DURING THE SCHOOL YEAR.

**If you have any questions  
please feel free to:**

- 1) Email me: [mcastone@wdeptford.k12.nj.us](mailto:mcastone@wdeptford.k12.nj.us)**
- 2) Remind text me**
- 3) Edmodo post to the page**

Happy Summer!

Mrs. Castone

