

2020-21 AP Biology Summer Assignment

Welcome to AP Biology!

I'm pleased that you have decided to take AP Bio and have some advice for you to ensure we have a fun and successful year together. First of all, above all else you really need to like biology, a lot. A passion for biology will help carry you through the challenging portions of the course. Secondly, you need to have a strong work ethic. This course is much harder than Biology-Honors from a perspective of vocab fluency, ability to analyze data and apply knowledge in ways that are beyond what you have experienced so far in biology. I'm not telling you this to scare you but to hopefully encourage you to pause and really assess whether you are ready for this class. Bottom line, you are most poised for success if you can check off these three boxes:

- Interest in biology
- Strong work ethic
- Ready for the challenge

I am looking forward to beginning this journey with you as we explore what it really means to be a living organism. In this course you will study and learn the equivalent of two semesters of college biology. Since the College Board curriculum is prescribed and we must complete our studies before the national exam in May, we cannot possibly cover all aspects of biology. The emphasis will be on *molecular biology*, reflecting the way that the field of biology is headed. With that in mind, we are starting with biochemistry because it forms the foundation for much of what we will be learning about this year. Our fast pace also necessitates that you brush up on these introductory concepts over the summer through this assignment. It is important that you have a firm grasp of these concepts since you will see them again, woven into future units such as cell biology, photosynthesis, cell respiration and molecular genetics. Even the study of evolution has become much more based in molecular (DNA) evidence rather than anatomical similarities between organisms. The time constraints dictate that our study of human anatomy and physiology will be a cursory one. After the exam we will also have a significant change of pace and classroom dynamic as we read the compelling book *The Immortal Life of Henrietta Lacks*.

I hope you become as excited as I am about biology as we delve into the world of cellular processes, genetics, and the evolutionary connections that link us all together.

Have a great summer!

-Mrs. Brako

Due on the First day of Class (late assignments not accepted):

- Read Chapters 1-5 and answer the corresponding questions from the Reading Guide packets/Formula work(NOTE: You do not have to do the *Test Your Knowledge* questions):
 - Chapter 2 Reading Guide
 - Chapter 3 Reading Guide
 - Chapter 4 Reading Guide
 - Chapter 5 Reading Guide
 - Formula Work
- This assignment is due on the first day of class
- You will have a **test** on this material during the first week of school
- If you have any questions, please email me at brakoe@madison.k12.ct.us