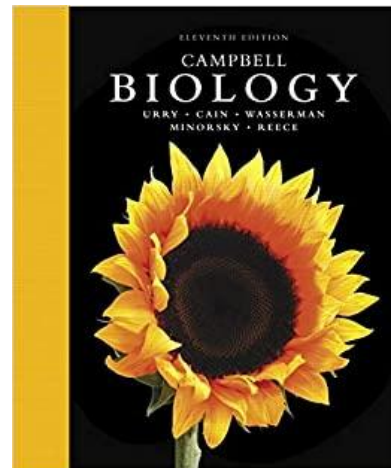


AP Biology

List of items needed for the 2022 Summer Assignment

1. Instructions for 2022 AP Biology Summer Assignment (see next page)
2. Textbook "**Biology**" Campbell and Reese (Eleventh Edition) *Needs to be picked up!*
3. General Chemistry Notes
4. Biochemistry Notes
5. General Chemistry/Biochemistry Short Answer Questions and Take-Home Test
6. Listen to the "This Podcast Will Kill You" - Episode 70 - Henrietta Lacks: HeLa, There, & Everywhere <https://thispodcastwillkillyou.com/2021/04/06/episode-70-henrietta-lacks-hela-there-everywhere/> and write a typed one page synopsis. Read the "[How to write a Scientific Synopsis](#)" article if you need help
7. AP Biology Scientific Method One Pager Directions and Rubric
8. Scientific Method - Reference PPT



If you join the class during the summer and/or did not get a copy of the above materials, they will be available in pdf format at the Science Department Website. <http://www.livingston.org/Page/9667>

Have a Great Summer!! Ms. Pelullo and Mr. Raiz

Contact BOTH with any questions: mpelullo@livingston.org (mmuirhead@livingston.org as of 7/15/22) and praiz@livingston.org

GO TO NEXT PAGE

Instructions—AP Biology Summer Assignment 2022

Chemistry, Biochemistry

You are receiving an assignment on **Chemistry, Biochemistry** and basic concepts relating to **DNA**. The assignment consists of a multiple choice test with 2 short charts on the last page. Just mark your answers in the test packet. In addition, the first two pages are **Short Answer questions** that you will be asked to answer on in-class tests. **YOU DO NOT** have to answer these short answer questions as part of the summer assignment!

The multiple choice test over the chemistry, biochemistry and DNA will be due the FIRST day of class. If you have any questions on specific content that you did not understand we will go over it in class (circle those questions you want to discuss). **You will be quizzed in class on this material within a week of the discussion.** The quiz questions will be very similar to the questions on the take-home test. Be sure to read “**Important Information about AP Biology Take-Home Assignments.**” It will explain what is expected of you about all take-home assignments this year, including the summer assignment. (See next page)

The Chemistry/ Biochemistry Short Answer Questions will be similar to the short answer questions we will ask on the in-class test. You are encouraged to read and answer the questions on your own *before* the in-class test. In the past, students have found that they were more successful on tests when they *practiced* writing the answers to the questions. At the very least, you could try to bullet-point answers to each question. If you have questions about your efforts, you may ask in class.

The purpose of this assignment is to allow you to review some general chemistry, biochemistry, and basic concepts relating to DNA that you will need to know in order to start the year in September. Most of this information will be a review of what you learned in 9th-10th grade Biology and Chemistry so it shouldn't be that difficult. Those of you who are entering class as a sophomore should be able to pick up the necessary information as it is basic chemistry. You are expected to know it coming into the class. Information on oxidation/reduction reactions will be taught in the units on Cell Respiration and Photosynthesis so you do not need to worry about that at this point. You should read Chapters 2 through 5 in your Campbell *Biology* textbook (11th edition) for biochemistry. The chapters on DNA in Campbell are excellent but you are not responsible for all the details right now. Actually, your freshman notes on DNA will help with this assignment. You are encouraged to work together, if possible, and discuss your answers with other students in the class. *This of course does not mean copying directly from another student, you won't learn that way.*

In September, we will go over some of the more difficult concepts including the last section in the notes on *Chemical Reactions and Thermodynamics*.

Important Note: If you took CP Biology freshman year, there is a considerable amount of material (both depth and breadth of material) that you did not cover compared to Honors Biology. In order to facilitate completion of the summer assignment, and to bolster your understanding, student versions of the Honors Biology notes packets are posted on our AP Biology websites (under the Honors notes tab). Please utilize these resources to assist you in better preparing for this course.

Within 2 weeks of the start of school, you will be tested over all of the Chemistry/Biochemistry information including the Short Answer Questions.

What to bring on the first day of class-

- 1) Answers to the Chemistry/Biochemistry Take-Home test
- 2) One page **typed summary** of “This Podcast Will Kill You” - Episode 70: Henrietta Lacks
- 3) Final Draft of Scientific Method One Pager

Important Information about AP Biology Take-Home Assignments

There are several reasons that you are given take-home tests and assignments *throughout the year*. The main reason is to help you learn the information you are responsible for in this course. In some cases, it also allows you to become familiar with information that we will not be able to cover completely in class, but nevertheless will be on the AP Biology exam in May. The amount of content that needs to be learned in this class is extensive. These assignments have been designed specifically to allow you to test yourself on the important material you need to know. The multiple choice and essay questions that accompany the note packets enables you to get feedback on whether or not you are absorbing the information. By completing these take-home tests, you are benefiting in several ways. First of all, you learn the material. Secondly, you receive credit for the take-home assignment, which can boost your grade. And thirdly, these tests serve as practice for your in-class test that you will have on the same topic. In-class tests can be difficult, but if you properly use the take-home assignments as a tool for learning, the in-class tests become much easier.

Over the past years, students have greatly benefited from these tests, however some students will take advantage of the fact that at least parts of these tests have been in circulation for some time. In order to cut corners when their workload is difficult, some students will copy answers from a previous student's test, or copy answers from a peer. This is obviously not the purpose of these assignments. We would like to trust that all of you would understand the importance of doing these tests on your own. The following criteria will apply to each take-home assignment given during the course of this year:

Each student is responsible for completing his/her own independent work. You may work with other students while going over the information, and you may consult each other on how to answer questions you are having difficulty with, but ultimately, you should be actively involved in answering all the questions. ***These tests are designed so that you can benefit from working together with others. They are not designed for you to just copy another student's answer.*** If you do not have someone you can work with or consult about the material on these assignments, please see us for help.

Your test should be completed on the assigned due date. To ensure that all of you did your own work, and that you paid attention to what you were doing (you actually learned something), **you may be quizzed on the same material that was on the take-home test the day it is due.** This quiz will usually consist of a few random questions from the take-home assignment.

Take-home assignments that are handed in late will be graded down 20% each day past the due date. You will NOT receive any credit for a test handed in after the key has been posted for the class or the assignment has been handed back to the rest of the class.

It is our hope that, by using the take-home tests appropriately, you will become comfortable with the material, and be more successful on in-class tests as well as the AP Test in May!

Your fearless leaders,

Ms. Pelullo and Mr. Raiz