

AP Biology Summer Assignment 2013

Murrieta Mesa High School

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Welcome to AP Biology! You have taken on a rigorous course in which you will learn a considerable amount about how life functions on many levels, from a molecular perspective up to global relationships between ecosystems. Due to the amount of material we need to cover in preparation for the AP exam in May, you will be required to do some independent study over the summer. The assignment will cover an introduction to scientific processes (chapter 1), a review of chemistry (chapter 2-3), and an introduction to carbon structure (chapter 4). We will have a test over chapters 1-4 the first week of school.

Late assignments will NOT be accepted. In order to keep up with the pace of the class and be prepared for labs, lectures, quizzes, and tests, you must stay updated with all your assignments.

Website Links:

The AP Biology website has links to all introductory materials and the Pearson website on the home page. The navigational panel to the right will take you to the pages containing the reading guides and the video links.

Contracts – DUE FIRST DAY OF SCHOOL

- Review the syllabus, student contract, and safety contract. Sign the class contract and bring with you on the first day of school. Check the class website occasionally over the summer for information about the upcoming year.

Assignment #1: Pearson Website Registration – immediately

To have access to online resources from your Campbell text follow the steps below.

1. Go to the following link: www.pearsonschool.com/access
2. Follow the steps using this code: **SSNAST-SLUNK-YOGIC-NEMAN-MAINT-PIPES**
3. Under 'Cover Titles' select science
4. Select our text book 'Campbell Biology, 8e, AP Edition'
5. Click 'student registration'
6. Under 'do you have a Pearson Education Account' select 'NO'
7. Create a user name and password and agree to the license agreement
8. Join our class (MMHS AP Bio 2013) – class code = **cm677801**
9. Email me at the gmail account above if you have any problems.
10. ****You will need to Pearson Account to complete all the summer assignments – register ASAP****

Assignment #2: Letter of Introduction – DUE JUNE 30

Write a brief letter of introduction to me. Include the following information: DUE June 30. Letters are to be emailed to me at ap.bio.mesa@gmail.com and should be written within the body of the email, not attached as a document. In the subject line write 'Introduction – (last name_first initial)'. Letters are to be written in a formal style with proper salutation, correct language, grammar, and spelling (no text abbreviations!), and a proper closing.

- Are you a junior or senior? What other science courses have you taken and your grades.
- Why you are taking AP Biology and what are your expectations regarding the course (amount of time study time, difficulty of content, lab experiences, etc...)?
- What activities you are involved in during the school year and which other AP courses are you taking this year
- What your plans are for after high school
- Anything interesting about yourself you would like to share with me (hobbies, family, jobs) ☺

Assignment #3: Chemistry Review and Introduction to Organic Chemistry

1. Chapter 1 – Introduction to themes:

- a. Watch Bozeman videos – complete notes in your class notebook
 - i. Video A – The new AP Exam
 - ii. Video C – Introduction to Biology
 - iii. Video 3 – Scientific Questioning
 - iv. Video 6 – Scientific Explanations and Theories
- b. Complete the reading guide for CH 1
- c. Complete the CH 1 self-quiz online – results will be automatically recorded

2. Chapter 2 – Chemical context of life:

- a. Watch Bozeman videos – complete notes in your class notebook
 - i. Video D - Chemical Bonds
- b. Online Activities (Pearson Website – CH 2)
 - i. CH 2.3 – Hydrogen Bonds
- c. Complete the reading guide for CH 2
- d. Complete the CH 2 self-quiz online – results will be automatically recorded

3. Chapter 3 – Water and the environment:

- a. Watch Bozeman videos – complete notes in your class notebook
 - i. Video E – Water: A Polar Molecule
 - ii. Video F – Acids, Bases & pH
- b. Complete the reading guide for CH 3
- c. Complete the CH 3 self-quiz online – results will be automatically recorded

4. Chapter 4 – Carbon:

- a. Watch Bozeman video – complete notes in your class notebook
 - i. Video G – Molecules of Life
- b. Online Activities (Pearson Website – CH 4)
 - i. CH 4.2 Activity Diversity of Carbon Based Molecules
 - ii. CH 4.2 Investigation - What factors determine the effectiveness of drugs
 - iii. CH 4.3 Activity – Functional Groups
- c. Complete the reading guide
- d. Complete the CH 4 self-quiz online – results will be automatically recorded

Assignment #4: Free Response Question Practice - DUE: by email – August 10 (complete by hand, scan and email the document)

Essay writing on the AP exam is very different than on English or history exams. You get no points for style, only for content. The essay portion of the exam is the second part of the test. You will be given two long free response questions and four short answer free responses. The essay portion is 90 minutes, with a 10 minute reading/preparation period, and 80 minutes of write time. You will be allowed to outline, but not write, during the reading period. This is to give you time to prepare your thoughts and avoid rambling essays

When writing:

1. **Do NOT** write an introductory paragraph or a concluding paragraph. This is a waste of time. Although it is good writing, you will earn no points for good writing—sad but true.
2. Dissect the question into its component questions. How many separate pieces of information is the author asking for and what are they?
3. Write logically using your outline as a reference. If the question asks for one example, choose your best example and fully explain it. Readers are trained to grade the first example given. Therefore, if the question asks for one example and your first example only earns one point, it doesn't matter that your second would earn two. The rationale behind this is that it prevents students from benefiting from "mind dumping", where the student writes anything that might possibly be related in an effort to earn points.
4. Avoid contradicting yourself. Although readers look for places to give points, contradictory statements can negate earned points.
5. Avoid fluff... in the words of Sergeant Joe Friday 'just the facts, ma'am'. AP readers don't care about fancy writing and metaphors; they want to know that you know the information.

Now the assignment: complete this after you read chapter 3. Do not use notes or the book and give yourself only 25 minutes. The point is to practice essay writing for the test.

1. Prepare an outline
2. Write your essay.

FRQ 1: The unique properties (characteristics) of water make life possible on Earth. Select three properties of water and

- a) For each property, identify and define the property and explain it in terms of the physical/chemical nature of water.
- b) For each property, describe one example of how the property affects the functioning of living organisms.