

## AP Biology Summer Homework

Dear Student,

Welcome to AP Biology! I am excited to have you enrolled in this high level course. This course is designed to be the equivalent of a two-semester introductory biology course usually taken in the first year of college. Throughout the course, you will become familiar with major recurring ideas that persist throughout all topics and material. The 4 Big Ideas are:

- **Big Idea 1:** The process of evolution drives the diversity and unity of life.
- **Big Idea 2:** Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis.
- **Big Idea 3:** Living systems store, retrieve, transmit and respond to information essential to life processes.
- **Big Idea 4:** Biological systems interact, and these systems and their interactions possess complex properties.

To successfully complete the course and meet all of the required objectives, you will need to do independent work both during the summer and throughout the school year. The summer homework is your introduction to AP Biology. You will need access to the internet, if you are not able to access the internet at home, the public library is an option. Failing to complete required summer work will have their assignment grade dropped a full letter grade on the first day it is late. Three days after the due date the assignment will be graded as a zero.

The textbook we will use is AP Biology, 8<sup>th</sup> Edition by Neil Campbell & Jane Reece. **You will need to stop by room 131 to pick it up for the summer.** I suggest you consider purchasing Cliff's AP Biology 4<sup>th</sup> edition available at local bookstores or online (Amazon sells it for about \$14). We will also be utilizing [www.schoolology.com](http://www.schoolology.com) to post homework, notes, classwork, discussions, and any other important material for the class; see Assignment 1 for instructions on setting up an account.

This may seem overwhelming at first, but I promise that if you put in the effort the reward will be well worth it. This year will be challenging, but I am here to help you every step of the way. Please do not hesitate to contact me at [Jessica.Mormino@weschools.org](mailto:Jessica.Mormino@weschools.org) at any point with questions or concerns.

I look forward to meeting you in the Fall!

*Mrs. Mormino*

### Assignment 1 of 4: Set up schoology.com account.

Course materials such as notes, lab write-ups, homework, classwork, tests, quizzes, labs, and useful resources will be found on Schoology. The site can be accessed at [www.schoology.com](http://www.schoology.com) or by downloading the Schoology app onto your own device. You will need to set your account up through the website and then download the app if you want it. Follow the instructions below to access your account:

1. Go to [www.schoology.com](http://www.schoology.com)
2. Click on "Sign Up" on the top right hand side.
  - a. If you already have a schoology.com account. Sign in with your username and password and click *Courses* and then *Join* at the bottom. You will then be prompted to enter the access code found in Step #4.
3. If you are a student click "Student," if a parent, click "Parent."
4. Enter the following access code *ZS3PN-2B762*
5. Complete the information and click "Register" to be enrolled in the class.

### Assignment 2 of 4: Chapter 1 Introduction: Themes in the Study of Life

Chapter 1 is an introduction to the important concepts in biology as well as reviewing the scientific method and the nature of science. For some of you, this will be a review. For others, you may have forgotten a lot of this information and now is a good time to go back and reacquaint yourself with these very important, basic concepts of biology.

1. Log in to [www.schoology.com](http://www.schoology.com) and download the Chapter 1 Reading Guide. It can be found by clicking on the Chapter 1 folder. Print the guide and complete it as you read.
2. Read Chapter 1. Be sure to answer the Reading Guide questions as you go.
3. Take the Self-Quiz and record your answers at the bottom of the Reading Guide.
4. On the 1<sup>st</sup> day of school, you will submit your reading guide to me for a grade.
5. Log back into your schoology.com account and click on the Chapter 1 folder. Click on the Quizlet link and review vocabulary for the chapter.

### Assignment 3 of 4: Chapter 2: Chemical Context of Life

Chapter 2 is a review of basic chemistry. For some of you, this will be a review. For others, you may have forgotten a lot of this information or have not taken chemistry. It will be important to have the basic concept to help with understanding of interactions as we move forward.

1. Log in to [www.schoology.com](http://www.schoology.com) and download the Chapter 2 Reading Guide. It can be found by clicking on the Chapter 2 folder. Print the guide and complete it as you read.
2. Read Chapter 2. Be sure to answer the Reading Guide questions as you go.
3. Take the Self-Quiz and record your answers at the bottom of the Reading Guide.
4. On the 1<sup>st</sup> day of school, you will submit your reading guide to me for a grade.

6. Log back into your schoology.com account and click on the Chapter 2 folder. Click on the Quizlet link and review vocabulary for the chapter.
7. For those of you that have not taken Chemistry or are having difficulty, I have posted a *Khan Academy Chemistry* link on schoology.com to assist you in learning the information.

### Assignment 4 of 4: Chapter 3: Water and the Fitness of the Environment

Chapter 3 is review of water and its effect on living organisms. These properties will be intertwined throughout the course of the year.

1. Log in to [www.schoology.com](http://www.schoology.com) and download the Chapter 3 Reading Guide. It can be found by clicking on the Chapter 3 folder. Print the guide and complete it as you read.
2. Read Chapter 3. Be sure to answer the Reading Guide questions as you go.
3. Take the Self-Quiz and record your answers at the bottom of the Reading Guide.
4. On the 1<sup>st</sup> day of school, you will submit your reading guide to me for a grade.
5. Log back into your schoology.com account and click on the Chapter 3 folder. Click on the Quizlet link and review vocabulary for the chapter.
6. Watch *Water and Life* as well as *Water a Polar Molecule* found on schoology.com under the Chapter 3 folder.

**\*You will have a quiz over Chapters 1 - 3 on the Friday of the 1<sup>st</sup> week of school. A review sheet is posted on schoology.com under the Chapter 1 folder.\***

You may communicate with me through Schoology by sending a message through the system or email me at [Jessica.Mormino@weschools.org](mailto:Jessica.Mormino@weschools.org). I will periodically check it throughout the summer and add additional materials that you may find helpful.

