

## AP Biology Summer Assignment 2015/2016

### Welcome to AP Biology!

I am very excited that you will be joining me this year for what promises to be an exciting adventure into all things living. This course is designed to provide you with a conceptual framework of modern biology and an understanding of the process of scientific inquiry, rather than just a collection of facts. Your efforts to understand science as a process will reward you with a mental compass that will lead you down the correct path in your scientific endeavors both this year and long into your future.

The AP Biology Curriculum centers on the four Big Ideas. Please make sure you are familiar with these, and we will work together to deepen your knowledge and unveil the relationships among them as well:

- **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.**

### Supplies needed for class:

- Textbook – Campbell 8<sup>th</sup> Edition
- Active Reading Guide – Campbell 9<sup>th</sup> Edition – PLEASE DO NOT WRITE IN THIS
- Lab Notebook – Available for purchase on the first day of school - \$15.00
- Summer reading books:
  - *Your Inner Fish* – Neil Shubin
  - *The Demon in the Freezer* – Richard Preston

### What to do before the first day of school:

- We will engage in a great deal of collaborative learning. This will require you to have email and Internet access.
  - Please complete the tasks on the **Digital Resources** sheet attached to this letter
- Register for online access to our textbook at [www.campbellbiology.com](http://www.campbellbiology.com)
- You will be completing the following items for chapters 1 and 2 this summer:
  - Take notes from the text as needed
  - Complete questions from the Active Reading Guide on your own paper or photocopy
  - Complete the concept checks and verify your answers using the answer key in the back of the book
  - Complete the associated online activities and quizzes
- **Be prepared for The Chapters 1 & 2 exam on 8/26.**
- Read the materials for our first lab on **Animal Behavior** which is attached to this letter
  - Be familiar with –taxis and –kinesis
  - Understand the behavior of pillbugs
  - Be ready for an inquiry experiment in animal behavior on 8/24, the first day of school

As an AP Biology student the expectation is that if you don't know it; look it up, ask a peer, ask me! Please utilize your books, the Internet, Canvas, email. Stating that you don't know will never be acceptable!

I truly am looking forward to working with you next year! Have a wonderful summer!

Mr. Cullum - [bcullumbiology@gmail.com](mailto:bcullumbiology@gmail.com)

## Digital Resources Assignments

It is **important** that you now, as a young adult getting ready to enter college, create a PROFESSIONAL e-mail account. [GetBuckets@snailmail.com](mailto:GetBuckets@snailmail.com) may be cool, but not good for your future endeavors in the academic arena or placing on a job application. Please take the time to create a professional email if you do not already have one, and then share it with me at [bcullumbiology@gmail.com](mailto:bcullumbiology@gmail.com)

Throughout the year we will use the following digital resources, so it is important that you sign up for access to these as soon as possible.

- **Canvas** – we will be joining this at the start of the school year
- **Remind 101** – please create an account using this link <https://www.remind101.com/join/mrcullu>
- **Google Drive** – please setup a Google Drive account and create a folder for AP Biology, and then share that folder with me.

Once you have setup the above resources, please create an introductory statement and email it to me. Your statement should be in paragraph form and include the following pieces of information:

- Your full name and what you prefer to be called
- What grade you will be entering
- What other clubs, sports, extra-curricular activities are you involved in?
- Which science course are you currently taking, and which ones have you already completed?
- Why is your reason for taking AP biology?
- What are you most excited about in AP biology, and what are you most apprehensive about in AP biology?

Be creative and memorable in your introduction, for many of you this will be the first impression I have of you, so choose your words carefully! ☺