



AP Biology

Mrs. Matson

Summer Assignment

Topics: Macromolecules & Laboratory Foundations

Over the summer, students in AP Biology are required to review/complete the three Khan Academy Units listed below, interface them with the chapters in the textbook, and read from the AP Biology Laboratory Investigations Book to review macromolecules and to prepare for inquiry based labs that populate the syllabus:

A. **Khan Academy** – its free! Set up a student account and read/watch podcasts under biology:

Unit One:

1. Introduction to Macromolecules
2. Carbohydrates
3. Lipids
4. Nucleic Acids
5. Proteins

Make sure that you practice the questions at the end of each section.

Unit Two:

1. Scientific Method (All portions through Practice: Scientific method and data analysis)
2. Controlled Experiments (All portions through Practice: Experimental design and bias)

B. **AP Biology Investigative Labs: An Inquiry-Based Approach Student Manual – 2012 Edition**

*can be purchased through College Boards On Line Store or often on Amazon– this is the manual required for the course

Introduction Section	S1
Chapter 1: What is Inquiry?.....	S3
Chapter 2: Written, Verbal, and Graphic Information.....	S5
Chapter 3: Quantitative Reasoning in AP Biology.....	S9

Our textbook is Campbell Biology © 2016 – *ebook version suggested*

Author: Urry, et al.

Publisher: Pearson

ebook subscription ISBN: 9780134446417

Paper text – NOT REQUIRED – ISBN: 978013408218

The summer assignment should be completed by the first day of class. There will be a test on the material at the end of the first class rotation cycle. Students will have the opportunity to ask questions on this material before the test. We will be starting a controlled, self designed experiment within the first week of school. **The material assigned is an essential review of the material covered in the 9th grade biology courses at Rocky Hill School.**

The matching AP textbook chapters for the Khan Academy modules are Chapters 1 and 5. The concept check questions that follow each section of these chapters are ones you are expected to be able to answer, as well as the chapter review questions at the end of these two chapters. (Look at them and see if your answers match the back of the book – no written work required)