

AP Biology Summer Assignment

Materials:

Textbook: **Campbell Biology in Focus AP Edition 1** (REQUIRED)

- ISBN 10:0-13-310217-3; ISBN 13: 987-0-13-310217-8

[Science Music Video AP Biology Interactive Tutorials](#) (REQUIRED)

- [Register here](#)
- Using the link above sign up for a student account using your **SFHS email** & registration code: **summer**
- Review the "[Science Music Video AP Bio Interactive Tutorial Hints](#)" on the 2nd page below before beginning

Introduction

As I shared with you during our application meeting, we have so much content to cover in such a short amount of time we need to complete chapter 2-4 over the summer. You will be tested on chapters 2-4 the 3rd day of class Thursday, August 13th. The test will be all multiple choice questions similar to those at the end of each chapter, or the clicker questions pdf (link to these are below in "Additional Resources").

Procedures Complete the following for Chapter 2-4 by the first day of class, Tuesday, August 11th, 2020:

Chapter 2 The Chemical Context of Life pp.18-39 (Due 1st day of class)

- Annotate the chapter; taking notes using a style of your choice
- Complete Ch 2 SSE p 37 in a google doc, answers questions in complete sentences
- Complete the following Science Music Video's AP Bio Interactive Tutorials on Unit 1 Chemistry of Life:
 - Topic 1.1: The structure of Water & Hydrogen Bonding
 - [Water, Polarity and Hydrogen Bonds](#)
 - [Acids, Bases & pH scale](#)
 - Carbon and Functional Groups
 - [Carbon: the Central Element](#)
 - [Functional Groups & Isomers](#)

Chapter 3 Carbon & the Molecular Diversity of Life pp 40-65 (Due 1st day of class)

- Annotate the chapter taking; notes using a style of your choice
- Complete Ch 3 SSE p 63 in a google doc, answers questions in complete sentences
- Complete the following Science Music Video's AP Bio Interactive Tutorials on Unit 1 Chemistry of life:
 - Topic 1.4-1.6: Biological Molecules (carbohydrates, lipids, proteins & nucleic acids)
 - [Biochemistry 1: Monomers & Polymers](#)
 - [Biochemistry 2: Carbohydrates](#)
 - [Biochemistry 3: Lipids](#)
 - [Biochemistry 4: Proteins](#)
 - [Chemistry 5: Nucleic Acids \(overview\)](#)

Chapter 4 A Tour of the Cell pp 66-93 (Due 1st day of class)

- Annotate the chapter; taking notes using a style of your choice
- Complete Ch 4 SSE p 74 in a google doc; answers questions in complete sentences
- Complete the following Science Music Video's AP Bio Interactive Tutorials on Unit 2: Cells & Cell Membranes:
 - Topics 2.1-2.4, 2.10: Cell Structure & Function
 - [Surface Area, Volume, and Life](#)
 - [Introduction to cells](#)
 - [Animal Cells: Parts and Functions](#)
 - [Plant Cells: Parts and Functions](#)
 - [The endomembrane System \(ER, Golgi, Lysosomes\)](#)
 - [The evolution of Cellular Compartmentalization](#)

Science Music Video AP Bio Interactive Tutorial Hints:

- Read ALL the content on every page of the tutorials.

- DO ONLY the sections assigned above under each chapter (**Click each link**).
- Use this link to learn [HOW TO CHECK YOUR SCORES](#). (check your scores often)
- For Drag & Drop questions:
 - Do Not literally "Drag and Drop" the terms
 - Simply click on the word or phrase you want to "drag" and then CLICK on the space where you want to "drop".
- TO AID YOUR UNDERSTANDING:
 - Open the [student learning guides](#) found on this page and work ONLY on the sections which apply to those topics assigned for each chapter.
 - This is **NOT required**, but it will greatly AID you in your understanding.
- The website will automatically have you redo any questions you miss until you get it correct -- this will raise your score.

Additional Resources

[Khan Academy](#) is an official AP College Board Partner, (Videos & Course Challenges are **OPTIONAL** Resources)

Additional Ch 2 resources if you need to more clarification of ch 2 content (Not required for the first day of school)

- [Ch 2 Lecture slides](#)
- [Ch 2 Lecture slides notes](#)
- [Ch 2 clicker questions](#)
- Watch/review as many of the following Khan Academy AP Biology [Chemistry of Life](#) resources:
 - [Structure of water and hydrogen bonding](#)
 - [Elements of Life](#)

Additional Ch 3 resources to clarify your understanding of ch 3 content (Not required for the first day of school)

- [Ch 3 Lecture slides](#)
- [Ch 3 Lecture slides notes](#)
- [Ch 3 clicker questions](#)
- Watch/Review as many of the following Khan Academy AP Biology lessons: [Chemistry of life resources](#):
 - All of the [Macromolecules](#) resources
 - All of Properties, [Structure & Function of biological macromolecules](#) resources
 - All of [Nucleic acids](#) resources

Additional Ch 4 resources to clarify your understanding of ch 4 content (Not required for the first day of school)

- [Ch 4 Lecture slides](#)
- [Ch 4 Lecture slides notes](#)
- [Ch 4 clicker questions](#)
- Watch/review the following Khan Academy AP Biology [Cell structure and function](#) resources:
 - [Cell structures and their functions](#) resources
 - [Cell size](#) resources