

AP BIOLOGY SUMMER ASSIGNMENT

2022-2023

Hello and welcome to AP Biology! Over summer break you are expected to learn the material for Unit 1 Chemistry of life. You will be tested on this material within the first week of this class, there will be more details on this on our first day of school.

Here is the unit 1 outline:

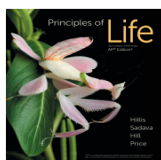
- 1.1 Structure of Water and Hydrogen Bonding
- 1.2 Elements of Life
- 1.3 Introduction to Biological Macromolecules
- 1.4 Properties of Biological Macromolecules
- 1.5 Structure and Function of Biological Macromolecules
- 1.6 Nucleic Acids

Summer Assignment:

Unit 1 Note Packet: Open this [link](#) to find the unit 1 notes packet. You will use this throughout your summer assignment. Make a copy of this and complete your packet online. Pages 1-4 of your packet are meant to highlight important information for each section. When done with the notes from each section go back to these pages and complete the vocabulary and the review questions. Complete these on your own at first! It will help you see how much you learned and what you still need to work on. You will be submitting this packet as a grade after the first day of this class.

Textbook Readings: As you complete the topics below read the following sections of our textbook. I have attached a [pdf link](#) for you to use. You will get a hard copy of the textbook on our first day.

2019 AP[®] Biology Course Framework Alignment to *Principles of Life for the AP[®] Course*, 2nd edition



CF Topic Number & Big Idea	2019 Course Framework Topic Title	<i>Principles of Life</i> Second Edition Chapter/Section
1.1 Systems Interactions	Structure of Water and Hydrogen Bonding	Concepts 2.1, 2.2
1.2 Energetics	Elements of Life	Concepts 2.2, 2.3, 2.4, 2.5, 3.1, 3.2
1.3 Systems Interactions	Introduction to Biological Macromolecules	Concept 2.2
1.4 Systems Interactions	Properties of Biological Macromolecules	Concepts 2.2, 2.3, 2.4, 3.1, 3.2
1.5 Systems Interactions	Structure and Function of Biological Macromolecules	Concepts 2.3, 2.4, 3.1, 3.2, 9.1, 9.2,
1.6 Information Storage and Transfer	Nucleic Acids	Concept 3.1

Step 1: [Welcome to AP Biology!](#)

Step 2: [Introduction to Statistics](#). If you have already taken Statistics this will hopefully all look familiar to you. If you haven't, that is okay! In this section you will review/learn about the major statistical concepts that we will use in this course.

Step 3: [Topic 1](#) Structure of Water and Hydrogen Bonding

Step 4: [Topic 2 and 3](#) Elements of Life and Introduction to Biological Macromolecules

Step 5: [Topic 4,5,and 6](#) Properties of Biological Macromolecules, Structure and function of macromolecules, and Nucleic Acids