

AP Biology Summer Assignment

Dr. Bauer | 2021-2022

I am so excited to get to know you all this year! I absolutely love biology and am looking forward to discussing some fascinating concepts in this course. While I am not requiring summer work this year, *there are several things you can do to help ensure you get off to a great start and have a successful year.*

1. Designate an AP Biology 1" notebook with 4+ tabs (Notes, Unit Summaries, Labs/Activities, Quizzes)
2. Check out the list of books below and consider reading one. I have selected these books because they are easy to read, not too long, *include many central principles and examples that you will see throughout the year and on the exam*, and they are just *great* books. Some Assembly Required is one of my all time favorite books - you will learn so much about how our bodies develop and work!
3. Check out some of the resources that we will be covering in Unit 1 to get a bit of a jumpstart. This is especially helpful if you are a little nervous about the class or don't remember much from freshman biology and want to set yourself up for success.

Recommended Books:

*If you choose one of these books, highlight things interesting to you or important using a **green** highlighter! Bring your book to the first day of class and you will receive extra credit.*

- ★ [Shubin, Neil - *Your Inner Fish: A Journey into the 3.5-Billion-Year History of the Human Body*](#)
- ★ [Shubin, Neil - *Some Assembly Required: Decoding Four Billion Years of Life, from Ancient Fossils to DNA*](#)
- ★ [Carroll, Sean - *The Serengeti Rules: The Quest to Discover How Life Works and Why It Matters*](#)

Unit 1: Chemistry of Life Resources:

If you choose to review any of these resources, take notes on loose leaf notebook paper. Bring your notes to the first day of class and you will receive extra credit.

→ *Chemical Bonds*

- ◆ [Bozeman Science - Chemical Bonds](#)
- ◆ [OpenStax AP Biology Book - Ch 2.1 Atoms, Isotopes, Ions, and Molecules](#)
- ◆ [OpenStax AP Biology Book - Ch 2.3 Carbon](#)

→ *Properties of Water*

- ◆ [Bozeman Science - Properties of Water](#)
- ◆ [OpenStax AP Biology Book - Ch 2.2 Water](#)

→ *Biological Molecules, Hydrolysis, and Dehydration Synthesis*

- ◆ [Bozeman Science - Biological Molecules](#)
- ◆ Synthesis of macromolecules
 - [Dehydration Synthesis and Hydrolysis](#)
 - [OpenStax AP Biology Book - Ch 3.1 Synthesis of Biological Macromolecules](#)

- ◆ Carbohydrates
 - [Bozeman Science - Carbohydrates](#)
 - [OpenStax AP Biology book - Ch 3.2 Carbohydrates](#)

- ◆ Lipids
 - [Bozeman Science - Lipids](#)
 - [OpenStax AP Biology book - Ch 3.3 Lipids](#)

- ◆ Proteins
 - [Bozeman Science - Proteins](#)
 - [Amoeba Sisters - Protein Structure and Folding](#)
 - [OpenStax AP Biology book - Ch 3.4 Proteins](#)

- ◆ Nucleic Acids
 - [Bozeman Science - Nucleic Acids](#)
 - [Amoeba Sisters - DNA vs RNA](#)
 - [OpenStax AP Biology book - Ch 3.5 Nucleic Acids](#)

Please feel free to email me over the summer with any questions - sbauer@portergaud.edu